structures, work environments, materials, and plant (machinery and equipment). Maintainability of the agricultural machinery and vehicles affects maintenance safety and helps minimize the risks of MSDs and it should be considered at the design stage. Good maintainability means among others that all points for routine maintenance are easy to access, such as lubrication points, motor, and battery, servicing and maintenance intervals are longer, etc. Poor maintainability might reduce maintenance safety, it prolongs the tasks, and makes work more complicated, all of which can increase the risk of accidents. Good design can prevent accidents if it is made difficult or impossible to perform a maintenance task incorrectly or in an unsafe way.

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FIVE TOP TIPS FOR FARM MACHINERY MAINTENANCE

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Abstract. A five tips to ensure that farm machinery is always maintained properly are presented in the article. It is shown that preventive farm machinery maintenance can reduce the likelihood of breakdown of equipment and the risks that technical specialists face during on-site repairs.

Keywords: farm machinery, wear, breakdown, scheduled maintenance, preventive measures.

Preventive and regularly scheduled maintenance is vital to the efficiency and life of farm machinery. This type of machinery makes it possible for traditional industries to operate on a large scale. Agriculture are among the global industries that could not exist in today's world at the scale they do without the use of different farm machinery to support their operations.

Preventive farm machinery maintenance preserves the value of the equipment. Keeping machines in good working order extends equipment life and keeps opera-

tors safe. It also ensures the availability of the machinery. Early detection of problems allows repairs to be made before the situation worsens. Machinery that does not need to be taken offline for extensive repairs will avoid production interruptions. Regular inspections and analysis can be used to predict and prevent component failures that may create safety hazards and breakdowns of farm machinery.

Properly maintained farm machinery has a much lower chance of breaking down when you need it the most and these machines pose much less risk to those working with them and your resell value is a lot higher when you take great care of your machinery. Many farmers don't know how to properly care for big, bulky and expensive machines.

Here are a few tips to ensure that farm machinery is always maintained properly.

1. Keep daily records of use and oversee operation. Far machinery wear and breakdown are often made worse by unskilled handling. Keeping records of machinery use and monitoring daily operations can help pinpoint when and where the machinery is being used by inadequately skilled operators. A new way to oversee the operations of farm machinery is via GPS. The device tracks movement and records it in digital records, which are organized to be easily retrieved. Problems can be caught early, and breakdowns can be prevented.

2. Maintain a schedule of planned maintenance. Farm machinery components break down, and wear is inevitable. Establish forecasts for the expected life of all components and replace them on schedule. Part replacement must be done by knowledgeable technicians. For example, bearings are key components of heavy farm machinery equipment and can be easily damaged or worn. Bearing housings should be regularly maintained, including inspection for corrosion and wear, and replaced when necessary. A maintenance log should also be kept to ensure regular checks are not missed and compliance is measured.

3. Inspect and monitor components for damage and wear. A planned maintenance schedule can predict component wear. It is necessary to inspect components on an ongoing basis visually to monitor wear and prevent equipment failure. Components that must be replaced ahead of schedule may signal a larger problem that needs to be diagnosed. Check belts, pulleys and chains for alignment and condition. Inspect gears and sprockets for broken teeth, cracks and misalignment.

It should be remembered that fluid analysis is also a regular maintenance schedule part. Analysis of used lubricants and other fluids is an excellent way to diagnose problems and prevent machinery wear and breakdown. Identifying contaminants in the fluids can lead analysts to the source of wear and damage.

4. Lubricate and Clean Frequently. Working farm machinery requires daily maintenance. Moving parts in engines and power trains as well as some other components demand frequent lubrication. Such components as hydraulic lifts and bearings must be monitored and lubricated at the first sign of need.

Contamination can lead to machinery breakdown. Water is a major source of corrosion. Lubrication prevents corrosion. Maintaining seals and replacing filters will help keep lubricants free of contaminants.

5. Protect equipment during storage. Large and small farm machinery should be stored under cover whenever possible. Motors, turbines, mixers and other equipment should be rotated frequently. Inspect idle machinery for rust, condensation and contamination. Don't forget to check all lubricants. Oil-mist lubrication is a good solution for the damaging effects of warm, humid environments.

It should be noted that good maintenance is important for farm worker safety. Farm machinery maintenance can be dangerous. It is often conducted in close contact with running machinery. The conditions can be closely confined and unhealthy. The work is non-routine and subject to human error. There is often time pressure involved as well.

Preventive maintenance and planned capital repairs of farm machinery and equipment will reduce the likelihood of breakdown of equipment and the risks that technical specialists face during on-site repairs. Workplace accidents are also significantly reduced.

With proper maintenance farm machinery will stay in great shape for a long time to come and farm machinery will be much more reliable.

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BIOFUEL SYSTEM INSTALLATION AND MAINTENANCE

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Abstract. The article deals with biofuel system installation and maintenance. The article identifies four maintenance areas of particular importance in biomass operation.

Keywords: A biomass boiler, furnace, burnout, combustion system, a maintenance schedule.

Biomass is used for facility heating, electric power generation, and combined heat and power. The term “biomass” encompasses a large variety of materials, including wood from various sources, agricultural residues, and animal and human waste.