weathered barrels in baskets and so on.

We hope the beauty of the wheat harvest is reflected at county fair with many sheaves and wheat weaving as well as exhibits of harvested grains. Remind the fellows to bar up some

What if ash falls on your combine?

Volcanic ash is abrasive and its presence will increase the wear rates of combine components. Some modifications of equipment, more frequent servicing, and exercising greater care in carrying out

seal will wear [illegible]

the ash to get into the bearings. Grease bearings more often to help flush out the ash particles. The bearing lubrication interval should be

third that

recommended by the combine manufacturer. Indiscriminate substitution of lubricants can lead to premature bearing failure because of improper lubrication of the bearings. Stringy, long fiber greases, for example, tend to form their own seal and may be satisfactory for slow speed journal bearings but overheating problems can develop when used on high speed ball or roller bearings. Be sure to wipe clean all grease fittings before the grease gun nozzle is attached. Wheel bearings should be cleaned and repacked at more frequent intervals, also.

OSU offers tips

Belt and chain drives: Belt pulleys and chain sprockets should be properly aligned. Concentrated side loading resulting from the misalignment increased the wear on the sides of V-belts, pulley grooves, chain links, and sprocket teeth. Belt drives should be properly tensioned to avoid belt slippage which can cause increased wear on the belt cover, burned spots, and overheating. Roller chain life will be drastically reduced because of the abrasive nature of the volcanic ash. Of the chain manufacturers, suppliers, and farm equipment manufacturer service personnel contacted, most favor frequent lubrication of chains. If possible, clean the chain off with steam or water under pressure. Relubricate the chain with SAE 30 oil. It is important that the side bars and pin joints be thoroughly lubricated. Rollers can wear without changing the pitch length of the chain but pin joint wear results in a lengthening of the pitch which further accelerates sprocket tooth wear.

The engine is the most complex part of the combine. It has many parts which operate with small clearances and, consequently should be given special attention.

Air cleaning system: Precleaners: Install a precleaner if the engine is not already so equipped. Precleaners can remove 80 to 90 percent of the dust and ash particles from the air thereby reducing the load on the regular air cleaner. Precleaners may be obtained from farm equipment dealers or automotive parts dealers. Installation of a precleaner should have no adverse effects on the operation of the engine if it is properly sized to meet the engine's air intake needs. Precleaners must be serviced in accordance with the manufacturer's recommendations to be most effective.

Air Intake Height: Raising the height of the air intake may have some beneficial effects because the dust concentration usually decreases with increased height above the ground. Air intake extensions should have dust-tight joints and be adequately braced to protect the air cleaner from undue stresses. The extensions should be of such length that they will not come in contact with power lines, telephone lines, or other overhead obstructions. The maximum legal vehicle height on Oregon highways is 14 feet.

Servicing Air Cleaners: Do not service air cleaners more often than necessary. The more times an air cleaning system is opened up, the more chances there are for volcanic ash to get into the engine. In addition, the pleated paper filter of a dry element air cleaner with a slight dirt accumulation is more effective than an unused filter. A new filter will remove all of the dust and ash particles 20 microns or larger in diameter whereas 10 micron and larger particles will be removed from the air by a filter that has been in service for awhile.

Some dry element air cleaners have an air restriction indicator that alerts the operator when servicing is required. The restriction indicators may fail to function, however, so the operator should watch conditions and hours of operation carefully. Operator judgement alone must be used if the air cleaner is not equipped with a restriciton indicator. Insufficient air will pass through filters in need of servicing to permit complete combustion of the fuel. Under these conditions, the engine will begin to smoke and-or lose power indicating that air cleaner servicing is required.

Wipe the dust and ash accumulation from the air cleaner body before removing the filter element. Exercise care when removing the filter element to avoid getting dust

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