



Schaeffer's gear oil lowers hub temperature by 38°F

The story

Kovar Farms of Ladora, Iowa, is a cattle company that also grows row crops and does custom forage chopping. Their John Deere 4940 Self-Propelled Sprayer was experiencing excessive heat buildup in the planetary gear hubs.

An oil sample was pulled from one of the hubs for analysis. Results showed critically high levels of iron and copper even though the John Deere 85W-140 gear oil had less than 300 hours of run time since it was last changed.

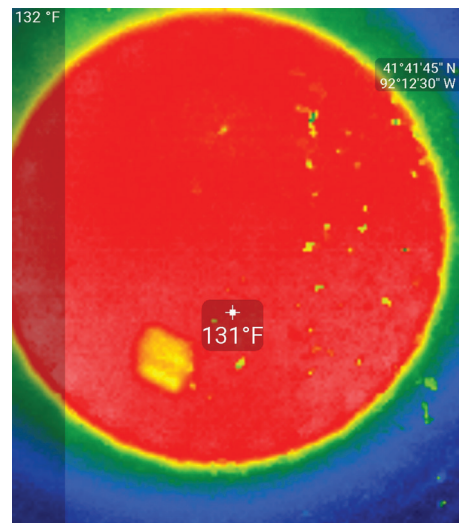
Stan Kovar, head of maintenance, tested Schaeffer's 214S Supreme One For All 80w-140 against their current fluid based on the recommendation from a local equipment dealer.

Kovar drained the gear oil from the left rear hub and refilled it with Schaeffer's. The sprayer was then used for around 2 weeks to top dress corn with dry fertilizer. The sprayer was then driven empty on a paved road at 35 mph for 25 miles back to the home farm.

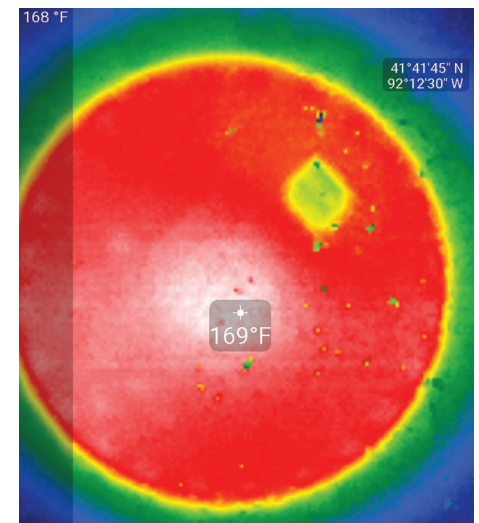
Temperature readings of both rear hubs were then taken with a thermal imaging camera.

Results from the thermal imaging camera showed the hub serviced with Schaeffer's gear oil was 38°F cooler than the hub serviced with John Deere's gear oil. Ambient temperature at the time was 75°F.

After seeing these results, Kovar Farms put Schaeffer's gear oil in all their planetary gear hubs on their sprayers and chopper to reduce friction and temperature, and extend equipment life. Kovar Farms has been using Schaeffer's products since 2010; other products they use include engine oil, fuel additives, grease and gear lubes.



The left rear hub, which contained Schaeffer's 80W-140 gear oil, was 131°F.



The right rear hub, which contained John Deere's 85W-140 gear oil, was 169°F.