Oil flushing for Hydro mechanical Governor & Actuator

Saumyen Chakraborty (Engine) - 2024-09-27 - Hydraulic Governor/Actuator

Oil flushing should be followed when oil become dirty or oxidized due to presence of moisture in the oil.
Following procedure should be carried out to clean the Governor/Actuator internally.

1. Run the Governor/actuator on engine for few minutes to raise temperature. Stop engine when Actuator surface temperature raised to approximately 70 degree C.
2. Stop the engine and drain the existing oil.
3. Mix 50:50 Governor/Actuator Oil & blue Kerosene Oil (1 lit Governor/Actuator Oil and 1 lit Blue kerosene Oil) in a clean container. Fill the Governor/Actuator with the mix Oil.
4. Run the engine for 5 to 10 min. at Idle. If possible, generate engine hunting which helps to clean well the Governor/Actuator internally. Temperature of the Governor/Actuator surface should be around 60 degree C.
5. Stop the engine and drain the Oil.
6. Depends on the existing Governor/Actuator Oil condition, above process (from 3 to 5) can be repeated one more time.
7. Finally poured clean Governor/Actuator Oil and run the engine for 15 min. at 70 degree C.
8. Drain the Oil.
9. Pour fresh clean Governor/Actuator Oil for Engine to end the process.

Oil flushing process only be applicable when oil contamination is not much high. If Oil contamination is high enough, oil flushing may not be able to remove sludge/sediment from the inside of Governor/Actuator. Governor/Actuator is necessary to overhaul then.