**IH 884 Priority Circuits Hydraulic Tests**

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| 1 Check transmission oil level when tractor has been at rest, then run engine and check level again after 3 minutes. | |
| *Oil level changes:* | *Default; go to step 2* |
| No change in oil level: | Rear frame rubber plug loose/deteriorated |
| Frame to main hydraulic oil pump foam rib seal deteriorated |
| Lubrication transfer pump failure. |

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| 2 Check function of power steering. | |
| *Operation normal:* | *Default; go to step 3* |
| Steering heavy: | Rectify before continuing. |

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| 3 Check lubrication pressure with 0-140 psi gauge in place of pressure switch at T joint on top of transmission. System oil pressure 5.5 psi (0.4 kg/cm2) at tickover PTO engaged & disengaged, 50 psi max revved up. | |
| *Pressure normal:* | *Default; go to step 4* |
| Pressure low; PTO disengaged: | Check IPTO spool has full movement of 29-30mm.  If OK, perform oil cooler by-pass valve checks (step 7 below). |
| Pressure low; PTO engaged: | Check pressure of IPTO supply pipe at T junction & at MCV connection (steps 4 & 5 below). |

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| 4 Check IPTO lock-up pressure with 0-350 psi gauge in MCV outlet to IPTO supply pipe (disconnected). Pressure 220-250 psi at 2200 rpm PTO engaged. | |
| *Pressure normal:* | *Default; go to step 5* |
| Pressure below 215 psi: | Check for no shims under regulating valve plug, else fault in oil cooler by-pass valve. Check oil cooler by-pass valve is free or broken spring. |

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| 5 Check IPTO lock-up pressure with 0-350 psi gauge at IPTO supply pipe (reconnected) T joint. Pressure 220-250 psi at 2200 rpm PTO engaged. | |
| *Pressure normal:* | *Default; go to step 6* |
| Pressure below 215 psi: | Faulty clutch pack and/or drive shaft. |

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| 6 Check for oil flow from power steering return pipe disconnected from MCV elbow with engine stopped. | |
| *No oil flow:* | *Default; go to step 7* |
| Flow emanating from elbow: | Power steering return check valve faulty. |

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| 7 Check oil cooler by-pass valve with 0-140psi gauge at outlet from MCV. Pressure 75-125 psi at 1000 rpm PTO disengaged. | |
| *Operation normal:* | *Default; go to step 8* |
| Pressure below 75 psi: | Valve faulty. |

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| 8 Check oil cooler supply & return pipes flow at oil cooler for 15 secs at half throttle. | |
| *Flow 2.2 litres in 15s*  *from supply pipe:* | *Default; go to step 9 or 10* |
| *Flow 2.2 litres in 15s*  *from return outlet:* | *Default; go to step 9* |
| Flow less than 2.2 litres  from return outlet: | Blockage in oil cooler. |

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| 9 Test out Torque Amplifier or Forward/Reverse shuttle if fitted. | |
| If all above tests inconclusive: | Test above unit as per procedure. Go to step 10. |

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| 10 Torque Amplifier or Forward/Reverse shuttle NOT fitted. | |
| If all above tests inconclusive: | Remove & check power steering return check valve assembly; power steering relief valve; flow divider at MCV. |

***END***