

Same Laser 130 Tractor Repair

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Aim of the Project

- The main aim of this project was to get the three-point linkage to lift up and down. I also wanted to inspect the tractor for other faults as it was new to me.

Background

- I recently purchased this Same tractor as it was previously owned by my father.
- It has a 6.2 litre six-cylinder air cooled engine, 24 speed transmission and consists of Bosch hydraulic components.
- The three point linkage on the tractor will not move up or down and is losing a significant amount of oil when activated.
- The three point linkage on a tractor is the system used to connect implements and attachments to the rear of the tractor.

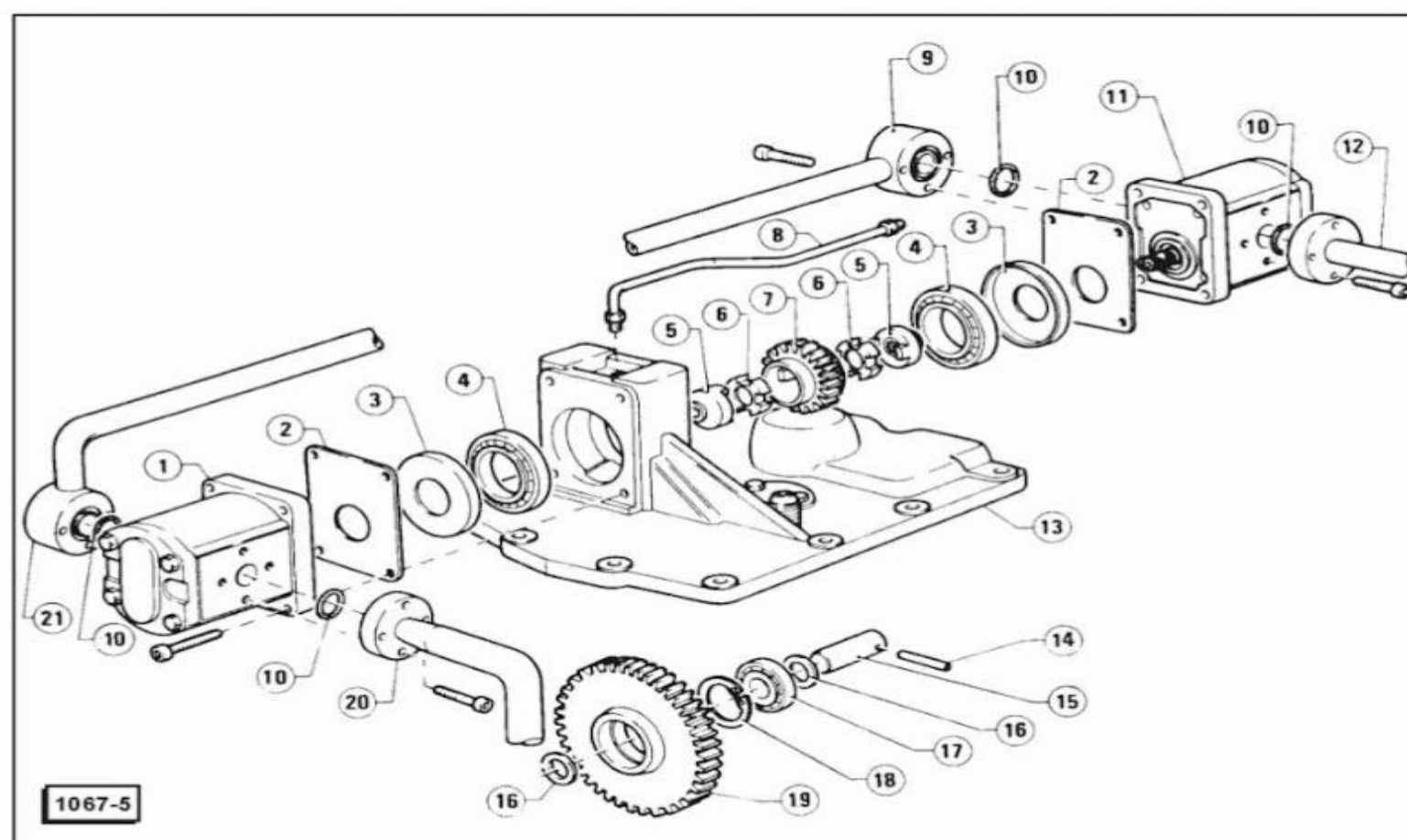


Photo of: Servers within Racks, aligned in Rows

Methodology

- Ensure the hydraulic oil was to the correct level.
- Check the hydraulic circuit for leaks or potential pressure loss.
- Replace hydraulic filters.
- Carry out a hydraulic flow test.
- Remove back wheels.
- Release the cab mounts to allow the cab to be elevated slightly.
- Remove existing hydraulic pump.
- Source a replacement and re install.
- Put the back wheels back on.
- Tightened the fan belt.
- Replaced the broken sunroof strut.

OIL PUMP



- | | | |
|----------------------------|--|-------------------------------------|
| 1 - Hydraulic lifting pump | 9 - Hydrostatic steering breather pipe pump | 15 - Pivot |
| 2 - Gasket | 10 - O-ring | 16 - Shoulder ring |
| 3 - Spacer | 11 - Hydrostatic steering hydraulic pump | 17 - Ball bearing |
| 4 - Ball bearing | 12 - Hydrostatic steering delivery pipe pump | 18 - Seeger |
| 5 - Joint | 13 - Cover | 19 - Gear wheel |
| 6 - Universal joint | 14 - Pin | 20 - Lifting pump breather pipe |
| 7 - Gear wheel | | 21 - Lifting pump oil delivery pipe |
| 8 - Lubrication pipe | | |

Parts

- Hydraulic pump
- Power steering pump
- Hydraulic pipe
- Hydraulic seals and fittings
- Sunroof strut
- Engine/hydraulic oil
- Filters

Challenges

- Getting the tractor from Meath to Limerick.
- Sourcing parts.
- Elevating the cab.
- Removing hydraulic pump.



Conclusion

- As the deadline rapidly approaches, I am pleased to say I have the vast amount of my project completed. I have replaced both the hydraulic and power steering pumps.