

Hydraulic Lift Linkage Stuck in raised position

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Nuffield, Leyland and early Marshall tractors use a "Lift Lock" to hold the hydraulic lift linkage in the raised position. The lift lock is situated on the top of the hydraulic top cover and is a simple spring loaded plunger. This plunger engages with the internal "Cross Shaft Lever" to hold the hydraulic lift linkage in the raised position.

When the plunger is in the "Down" position it will automatically engage with the cross shaft to hold the hydraulic lift linkage in the raised position. This will occur when the hydraulic lift linkage is fully raised. The plunger can be lifted and turned to hold it in the "Up" position to prevent engagement with the cross shaft. In this position the hydraulic lift linkage is free to move up and down. Early Nuffield tractors had a "Round" machined knob while later Nuffield, Leyland and Marshall tractors a "Pressed Steel" cap.

Known faults are as follows:-

1. Seized plunger due to lack of lubrication
2. Seized plunger due to ice forming in sub zero conditions
3. Damaged or missing pressed steel cap
4. Bent or damaged plunger
5. Tractor driver unaware of correct operation of the lift lock
6. Hydraulic operating linkage requiring adjustment

Problem solving.

1. Seized plunger.
Remove the plunger, clean both the hole and the plunger, lubricate and refit.
2. Seized plunger due to ice.
Tractors parked in the open are particularly prone to this problem during winter months. The answer is to move the tractor into a warm place overnight. The plunger should then be removed, cleaned, lubricated and refitted.
3. Damaged or missing pressed steel cap.
There are many reasons for the cap to become damaged, the main one being the top link fouling the cap. The cap can be removed, repaired and refitted. If the cap is very badly damaged it should be replaced with a new one. A missing cap should be replaced with a new one.
4. Bent or damaged plunger.
Unless the plunger can be repaired it would be better to fit a new one.
5. Tractor driver unaware of correct operation of the lift lock.
Reference to the drivers hand book will explain the correct operation.
6. Hydraulic operating lever linkage requiring adjustment.
Reference to the service manual or instructions on the Nuffield and Leyland Tractor Club Web Site show how this is carried out.

It should be noted that, if an implement is mounted on the tractor, the lift lock should only be used while the tractor is stationary and maintenance is being carried out on the implement. With the weight of implements increasing this advice replaces the original advice which stated that the lift lock should be used for implement transportation.