A “Rough” guide to “Transmission” oil draining and refilling

BMC, Nuffield, Leyland & Marshall Tractors

This guide is designed to give the owners of BMC, Nuffield, Leyland & Marshall Tractors an idea of where the various oil fill, oil level & oil drain points are on 9 speed, 5 speed, 10 speed & Synchro gearboxes.

Except for BMC Mini etc, all the above tractors use a common reservoir of oil in the transmission, final drive and hydraulics.
BMC Mini to Marshall 302 transmission, final drive and hydraulics have separate reservoirs.

The recommended oil for Nuffields up to and including the 10/60 is; SAE 90.
For Nuffield 4/65 and Leylands with dry brakes; Tractor Oil Universal, SAE 20/20W or SAE 20W/50.
For Leylands and Marshalls with wet brakes; Super Tractor Oil Universal.
BMC Mini to Marshall 302, transmission, final drive and hydraulics; Tractor Oil Universal.

Note; All oils recommended are for normal temperate operating temperatures. (Approx. 20º F to 90º F (-7º C to +32º C)

Capacities;
5 speed & 10 speed up to 10/60 = 12 Imp Galls (54.5 litres)
10 speed from 4/65 & Synchro 2 WD Middleweight tractors = 12.5 Imp Galls (56.5 litres)
4WD Middleweight tractors = 13 Imp Galls (59.3 litres)
6 Cyl 2WD & 4WD tractors = 11.25 Imp Galls (51.1 litres)
BMC Mini to Marshall 302 transmission = 19 Imp Pints (10.8 litres)
BMC Mini to Marshall 302 final drive = 2.25 Imp Pints (1.3 litres)
BMC Mini to Marshall 302 hydraulics = 16 Imp Pints (9.0 litres)

**Nuffields up to 10/60**

Oil fill on top of gearbox lid
Oil level dipstick in gearbox lid
Drain plugs under each rear axle

**Nuffield 4/65 to 10 speed Middleweight Leylands with or without Safety Cab with ‘Draught Control’ hydraulics**

Oil fill on top of gearbox lid (3)
Oil level dipstick in gearbox lid (1)
Drain plugs under each rear axle (2)

**Middleweight Leylands with or without Safety Cab with ‘Position Control’ hydraulics**

Oil fill on hydraulic top cover (3)
Oil level dipstick in gearbox lid (1)
Drain plugs under each rear axle (2)
Middleweight Leylands and Marshalls based on the Leyland with or without 'Q', 'QM' & Explorer Cab

2 WD tractors
Oil fill on hydraulic top cover (1)
Oil level plug on LH side of hydraulic unit (2)
Drain plugs under each rear axle (3)

4 WD tractors
Oil fill on hydraulic top cover (1)
Oil level plug on LH side of hydraulic unit (2)
Drain plugs under each rear axle & drop box (3) & (4)

(Note; Late Marshall tractors have a dipstick on the RH side of the hydraulic unit, not illustrated)

Tractors & Skid Units without hydraulics
Oil fill on gearbox top cover
Oil level dipstick in gearbox lid
Drain plugs under each rear axle
(Note; No illustration for these tractors)

6 Cylinder Heavyweight Leylands

Oil fill on hydraulic top cover (2)
Oil level plug to the left and above the PTO (1)
Drain plug on the under side of the hydraulic suction pipe (6)


Transmission oil fill on gearbox lid (Arrow)
Oil level plug (1)
Drain plug on the under side of gearbox (2)
Final drive oil fill & level plug (1)
Final drive drain plug (2)
Hydraulic oil fill on top of hydraulic oil reservoir (1)
Remove hydraulic filter to drain, LH side of gear box

Note: This guide is compiled from historical publications, any errors or omissions are accidental.

Since this is a general guide numerous tractor model numbers have been omitted.