

Leyland Middleweight Tractor Hydraulics - Draught, Position & Auxiliary Control Adjustments

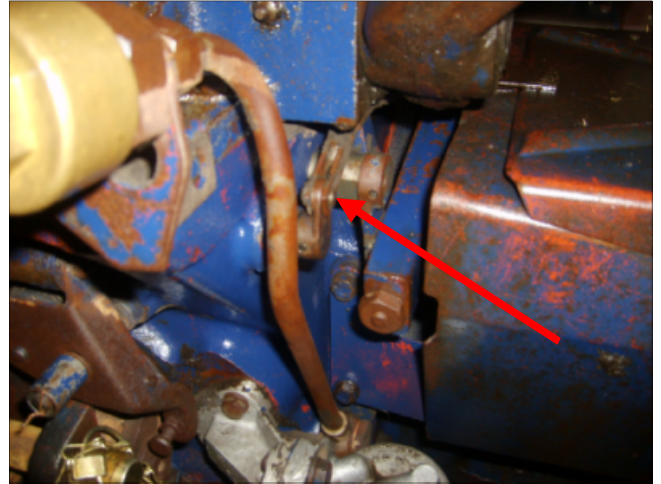
Auxiliary Control Lever (Both types of Quadrant)

Unlock the nut behind the clevis. Remove spring clip and pin.

Place Auxiliary lever in the full lift position at the top of the quadrant. Rotate the control lever fully forward.

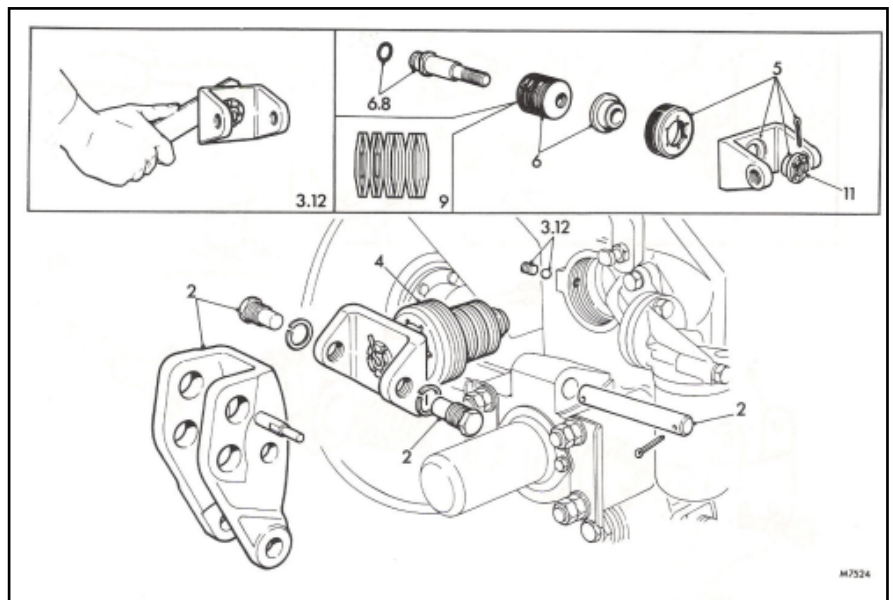
Adjust the clevis until the pin can be replaced freely.

Replace the spring clip then lock the lock nut.



Belleville Washer Pack (Top Link Spring Pack)

Assemble spring washers onto shaft in the correct order ensuring that a limiting ring is fitted between each pair of single washers (Smear Moly grease between washers) Fit actuator, retaining cap, actuator pivot and retaining nut. Tighten nut until the end-float between the actuator and washer pack is just eliminated. Tighten a further half turn to pre-load the washer pack, then slacken just enough to fit the split pin.



Fit the assembly to the lift unit and tighten the retaining cap until the end-float of the pack in the housing is just eliminated. (Don't over tighten) Tighten socket screw to lock retaining cap.

Main Draught / Position Control Lever (Non rack type)

Position Control

Place main operating lever in the transport position. Place the auxiliary and spool valve levers in neutral.

With the engine stopped, slacken the locknut at the rear of the main control rod and adjust the control rod to its shortest length, note the rod has Right & Left Hand threaded ends. (1)

Start the engine and lengthen the control rod until the relief valve operates. (5) Shorten the rod by 1½ turns on QM cab & Non cab, or 1¼ on Explorer cab and lock the lock nut. (6)

Draught Control

Remove the cover tube (If it's still fitted) from the draught sensing lever, unlock the draught sensing lever locknuts and turn the inner one clockwise to fully depress the lever. (2) (A spanner between the lever and pivot casting will help this operation)

Remove the actuator pin. (3) (If it's missing a new one MUST be obtained, it's vital to the correct operation of the hydraulics)

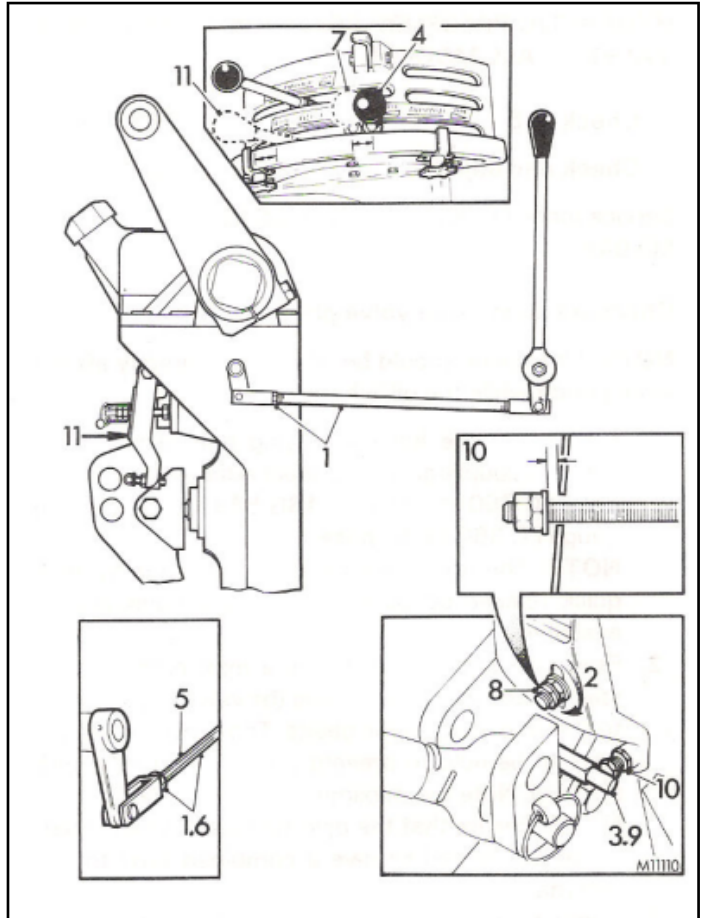
Move the main control lever forward 25.4 cm (1") on QM or cab-less or 1.7 cm (0.67") on Explorer models (measured at the quadrant), from the transport position into 'DRAUGHT' control; the relief valve should now operate again. (7)

Back off the draught sensing lever limiting inner locknut until the relief valve stops operating, then tighten until the relief valve just starts to operate again. Tighten the locknuts together, ensuring the inner nut is not allowed to turn.

Refit the actuator pin. (9)

Adjust the adjustment screw at the bottom of the bracket until there is a clearance of 2.54 mm (0.1") between the draught sensing lever and the plain washer, tighten the locknut. (10)

Check the operation of the main system by positioning the main control lever within 19 mm (0.75") of the bottom of the draught control quadrant and depressing the draught sensing lever fully inward; the arms should lift. (11) Refit the cover tube, retain with wire through the holes, (Production tractors had a lead seal over the wire) then stop the engine. (8)



Main Draught / Position Control Lever Rack Type

Position Control

Adjust stop on quadrant stop until there is no discernable horizontal movement of the rack whilst changing from Draught to Position control (Top rack, Position control. Bottom rack, Draught control). If available a DTI (Dial test indicator) can be used, positioned at the rear of the rack. Ensure there's full movement of the main lever in both Draught & Position Control

Remove the cover tube (If it's still fitted) from the draught sensing lever, unlock the draught sensing lever locknuts and turn the inner one clockwise to fully depress the lever. (A spanner between the lever and pivot casting will help this operation)



Remove the actuator pin. (If it's missing a new one MUST be obtained, it's vital to the correct operation of the hydraulics)

Select Position Control on the quadrant - Service Lever. Make sure the main lever is against the stop at the top of the quadrant.

Start the engine and run at idle speed. Slacken the Nylock nut on the side of the rack at the rear and rotate the large nut at the rear clockwise until the relief valve operates (audible).

Screw the nut anti-clockwise 5 complete turns then clockwise 1 complete turn to remove any backlash. Lock the Nylock nut on the side of the rack.

Draught Control

Move the Service Lever to Draught Control, and move the main control lever forward 25 mm (1") (measured at the quadrant), from the stop at the top of the quadrant. The relief valve should now operate again.

Back off the draught sensing lever limiting inner locknut until the relief valve stops operating, then tighten until the relief valve just starts to operate again. Tighten the locknuts together, ensuring the inner nut is not allowed to turn.

Refit the actuator pin.

Adjust the adjustment screw at the bottom of the bracket until there is a clearance of 2.54 mm (0.1") between the draught sensing lever and the plain washer, tighten the locknut.

Refit the cover tube, retain with wire through the holes, (Production tractors had a lead seal over the wire) then stop the engine.

Your Hydraulic System is now correctly adjusted - Good luck!