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Articulated Loader
Operator's Manual

50940509 Rev. F 01/21

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Mustang AL608, AL708 and AL708T, Manitou MLA-6, MLA-7 and MLA-T 516 Articulated Loader Operator Manual (50940509F)

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- Delivery Checklists
- Introduction
- Safety
- Specifications
- Indicators and Controls
- Operation
- Maintenance
- Troubleshooting
- Schematics
- EC Declaration of Conformity
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Telescopic Machines Raise Float Controls

⚠ WARNING

Make sure the attachment is lowered to the ground before activating float. Activating float with an attachment raised will cause it to lower rapidly, which can cause severe injury or death.

On telescopic machines, switch (P, Fig. 23), located on the right switch panel, enables load arm float.

With switch (P) depressed, push joystick (J) forward past the detent to engage load arm float.

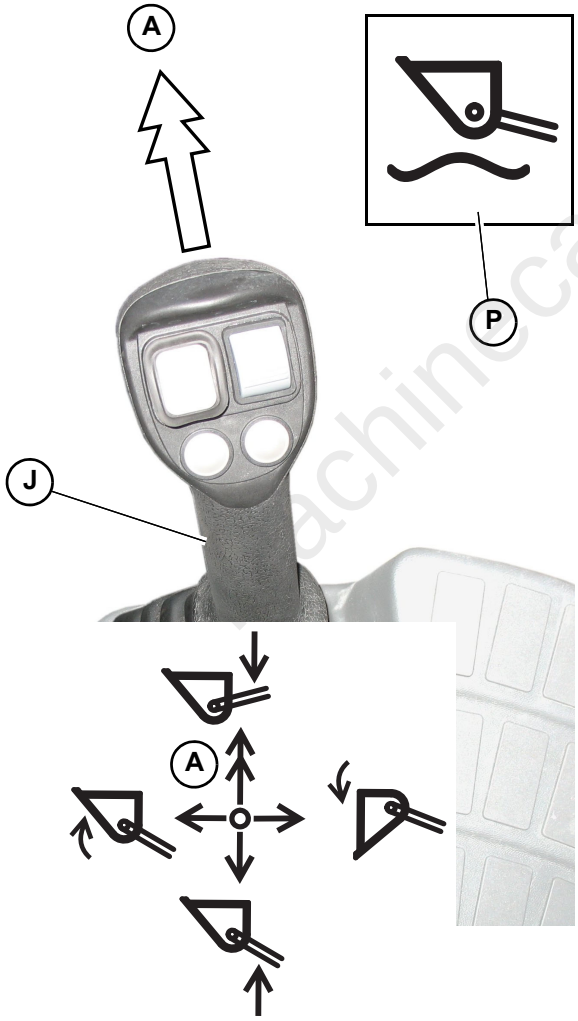


Fig. 23 – Telescopic Machines Float Controls

⚠ WARNING

If the joystick is pushed into - or pulled out of - the float position when switch (P) is not depressed, load arm motion will stop/start suddenly and may cause the machine to jerk and/or bounce..

Travel Direction Switch

Travel direction switch (B, Fig. 24) controls forward/reverse travel direction. Refer to “Travel Direction Switch” on page 85 for more information.

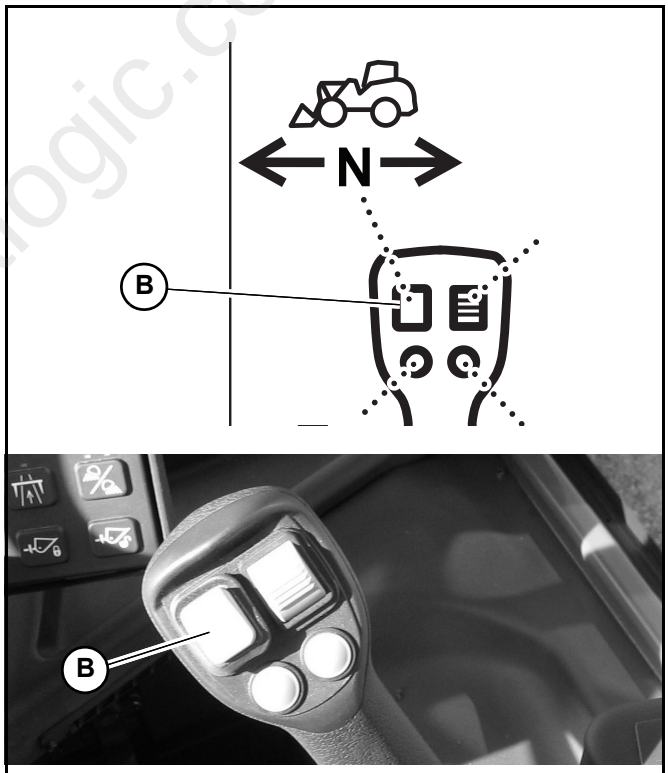


Fig. 24 – Travel Direction Switch

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Right Window Stop

When fully opened, the right cab window can be latched in the open position against the side of the cab. To release, press latch (T, Fig. 66).

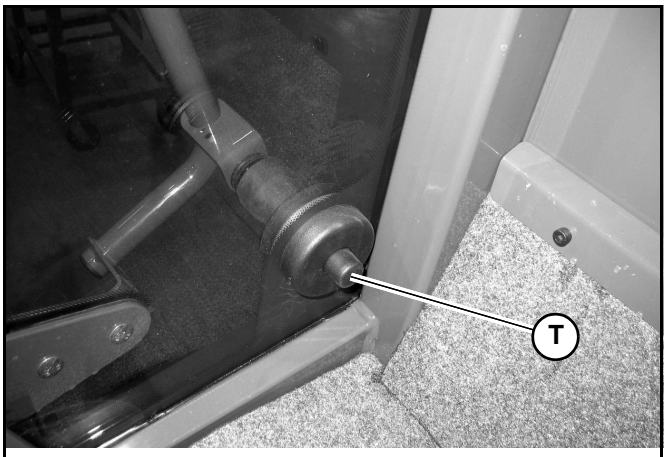


Fig. 66 – Right Window Stop

Operator's Seat Adjustment

The operator's seat has adjustments for:

- Forward and back horizontal seat and armrest position (G, Fig. 67).
- Forward and back horizontal seat position, separate from armrest position (H).
- Operator weight suspension (air suspension) (E).
- Seat height (F).
- Seat back tilt adjustment (J, Fig. 68).

⚠ WARNING

Never adjust the seat when the machine is in operation. Adjust the seat only when the machine is stopped.

After adjustments, make sure the seat adjustment levers are fully engaged before using the machine.

Seat/Armrest Forward and Back Horizontal Adjustment

NOTE: *Bar (G, Fig. 67) moves the operator's platform as one unit; Lever (H) moves the seat only.*

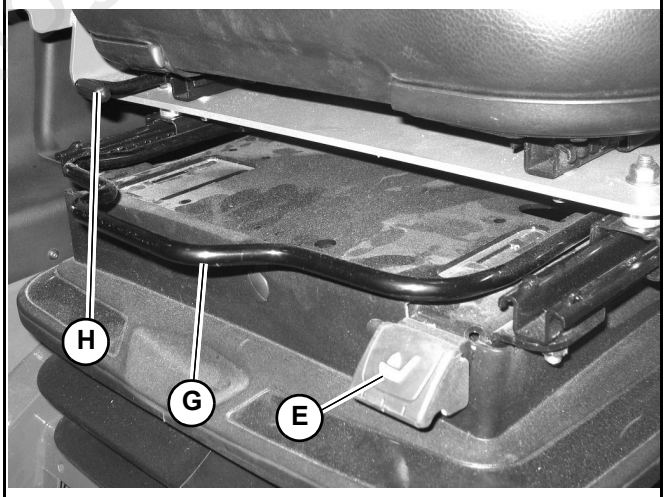
While sitting in the operator's seat, pull up on bar/lever (G or H, Fig. 67). Move the seat/operator's platform forward or back as desired. Release bar/lever (G or H) when the seat/operator's platform is in the desired position. Make sure the seat and operator's platform are locked in position after adjusting.

Seat Weight Suspension Adjustment

Air Suspension

While sitting in the operator's seat, press switch (E) as necessary to stiffen seat suspension as desired. Raise switch (E) to loosen seat suspension.

Air Suspension



Mechanical Suspension

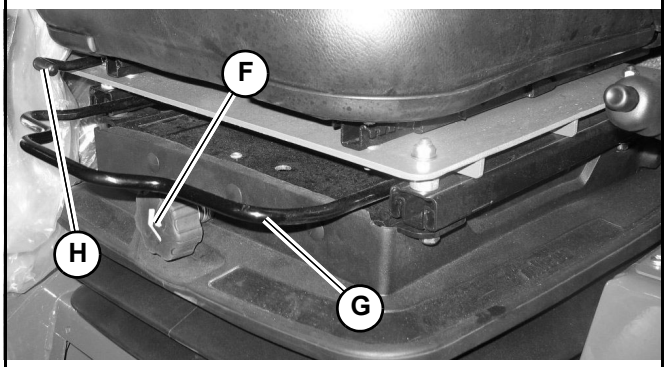


Fig. 67 – Operator's Seat Adjustments

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A2 – Load Arm Top Pivot (Fig. 162)
B2 – Lift/Slave Cylinders Base Ends (Fig. 163)
C2 – Lift/Slave Cylinders Rod Ends (Fig. 164)
D2 – Extend Cylinder Base End (Fig. 165)
E2 – Extend Cylinder Rod End (Fig. 166)
F2 – Tilt Link Pivots (Fig. 167)
G2 – Hitch Pivot Top (Fig. 168)
H2 – Bottom Hitch Pivots (2) (Fig. 169)
I2 – Hitch Lock Pins (2) (Fig. 169)
K – Articulation/Steering Pivot (3) (Fig. 170)
L – Steering Cylinder Rod End (Fig. 172)
M – Steering Cylinder Base End (Fig. 173)
O – Drive Shaft (3) (Fig. 174)

Fig. 152 – Lubrication (Telescopic Machines)



Fig. 234 – Left Tail Light Bulbs

3. Push the replacement bulbs into the sockets and twist to secure in place.
4. Position the tail light lens seal (not shown) onto lens (W). Position and secure tail light lens (W) onto the tail light housing and secure with screws (U).

NOTE: *For proper weatherproofing, make sure the tail light lens seal is properly positioned to seal the edges of lens (W) against the tail light housing.*

Headlight Bulb Replacements

⚠ WARNING

BEFORE beginning this service procedure, shut down the machine according to "Mandatory Safety Shutdown Procedure" on page 22.

1. Remove screws (E, Fig. 235) securing headlight lens bezel (F) and remove lens (D).

NOTE: *Retain the headlight lens seal (not shown) for re-installation.*

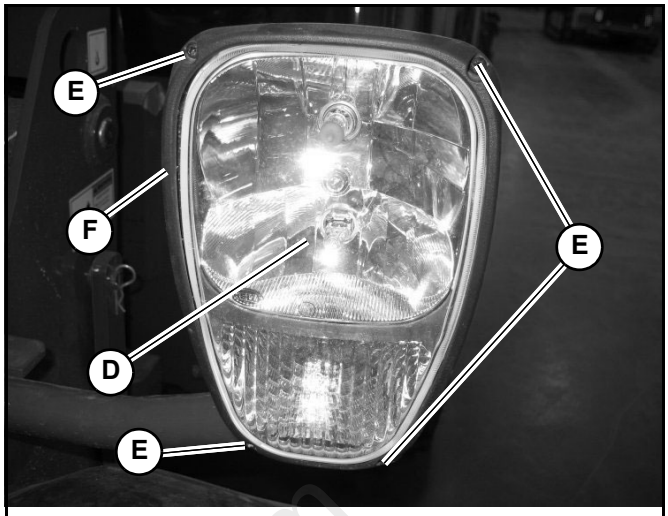


Fig. 235 – Headlight Lens

Refer to the following sections for specific bulb replacements:

- High Beams (A, Fig. 236). See "High Beam Bulb Replacement" on page 204.
- Low Beams (M). See "Low Beam Bulb Replacement" on page 204.
- Marker (C). See "Marker Light Bulb Replacement" on page 205.
- Indicator/Hazard (N). See "Indicator/Hazard Bulb Replacement" on page 205.

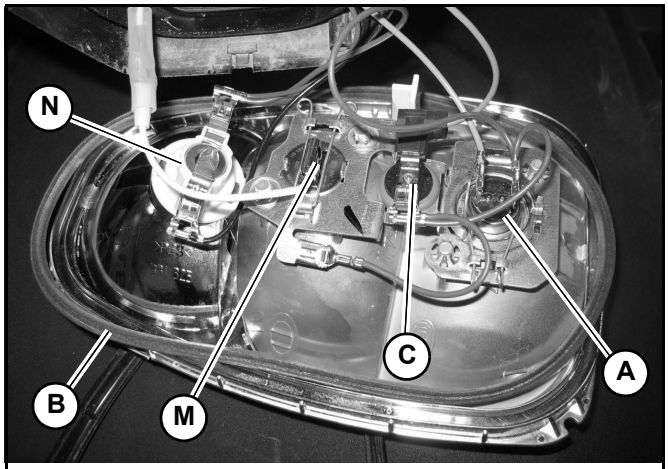


Fig. 236 – Headlight Bulb Locations

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Table 49: Deutz Engine Diagnostic Trouble Codes (DTC)

DTC			
SPN	**FMI**	**Trouble Code Type**	**Error Description**
4765	0	Exhaust Temperature Error	Temperature upstream DOC, temperature above upper shutoff threshold; temperature above upper warning threshold
4766	0	Exhaust Temperature Error	Temperature downstream DOC, temperature above upper shutoff threshold; temperature above upper warning threshold
4768	2	Exhaust Temperature Error	Temperature upstream DOC, plausibility error; Exhaust gas temperature sensors up- and downstream DOC are physically swapped
4768	3	Exhaust Temperature Error	Electrical error exhaust gas temperature upstream (DOC); signal range check high
4768	4	Exhaust Temperature Error	Electrical error exhaust gas temperature upstream (DOC); signal range check low
4769	2	Exhaust Temperature Error	Temperature downstream DOC, plausibility error
4769	3	Exhaust Temperature Error	Sensor error exhaust gas temperature downstream (DOC); signal range check high
4769	4	Exhaust Temperature Error	Sensor error exhaust gas temperature downstream (DOC); signal range check low
520521	5	Actuator Error (EGR)	Actuator error EGR-Valve (2.9;3.6) or Throttle-Valve (4.1;6.1;7.8); signal range check low
523009	9	Pressure Relief Valve Error	Rail Pressure Relief Valve: reached maximum allowed opening count
523009	10	Pressure Relief Valve Error	Rail Pressure Relief Valve: reached maximum allowed opening time
523211	9	Timeout Error (CAN)	Timeout Error of CAN-Receive-Frame EBC1
523212	9	Timeout Error (CAN)	Timeout Error of CAN-Receive-Frame ComEngPrt; Engine Protection
523240	9	Timeout Error (CAN)	Timeout CAN-message FunModCtl; Function Mode Control
523350	4	Injector Short Circuit Error	Injector Cylinder - Bank 1: short circuit
523352	4	Injector Short Circuit Error	Injector Cylinder - Bank 2: short circuit
523354	12	Injector Error	ECU detects an error of its injector high current output; injector powerstage output defect
523470	2	Pressure Relief Valve (PRV) Error	PRV will be forced to open; performed by pressure increase. PRV: is open, will be forced to open, the forced open failed; performed by pressure shock
523470	7	Pressure Relief Valve (PRV) Error	Rail pressure is out of the expected range; Maximum rail pressure in limp home mode exceeded, monitoring for maximum rail pressure in limp home mode with PRV

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