labrieplus

Parts & Service **Bulletin**

To: **All Distributors**
Regional Sales Managers and National Sales Manager

From: **Tim Salentine, National Service Manager**

Model: **Alley Gator**

Subject: **Hydraulic Pressure Checkout and Adjustment Procedure**

The following pages outline the procedure to properly check and adjust the various hydraulic pressures on the Alley Gator. Please insert this into your Alley Gator Maintenance Manual for future reference.

Please contact the LabriePlus Service Department at (800) 231-2771 with any questions or for further information.

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

The following procedure should be followed to check and adjust the hydraulic pressures of the Alley Gator hydraulic system.

STANDBY PRESSURE
Standby pressure is the most critical adjustment in the system and must always be the first step.

- Shut down the chassis engine and perform proper lockout/tagout procedures.
- Locate the "X port on the subplate of the packer valve, and install a 0 – 1,000 PSI pressure gauge by inserting a Tee fitting between the 90° elbow and hose.


- Start the engine, turn the pump on and ensure that no functions are engaged.
- With the engine at idle, the pressure gauge should read 320 PSI (±0 PSI).
- If the standby pressure is not correct, it may be adjusted per the following procedure:
    - Shut down the chassis engine and perform proper lockout/tagout procedures.
    - The standby relief valve is located at the valve on the hydraulic pump. Locate the adjustable relief cartridge on the standby relief valve; turn the adjustment screw clockwise (in) to raise the standby pressure, or counter-clockwise (out) to lower the standby pressure.

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

PACKER PRESSURE

Prior to making any packer adjustment, i.e. drift, chatter elimination etc, the correct packer pressure must be obtained.

- Shut down the chassis engine and perform proper lockout/tagout procedures.
- Locate the "X port on the subplate of the packer valve, and install a 0 – 5,000 PSI pressure gauge by inserting a Tee fitting between the 90° elbow and hose.

- Start the engine and turn on the pump.
- Operate the packer to its full pack stroke, and hold the control. Pack pressure should read 3,000 PSI.
- Operate the packer to its full retract stroke, and hold the control Retract pressure should read 3,000 PSI.
- If one pressure is correct but the other is not, check the pack cylinders for bypass.
- If the pressure is not correct for either function, adjust the packer pressure as follows:
    - Shut down the chassis engine and perform proper lockout/tagout procedures.
    - The packer pressure relief cartridge is located at the valve on the hydraulic pump.

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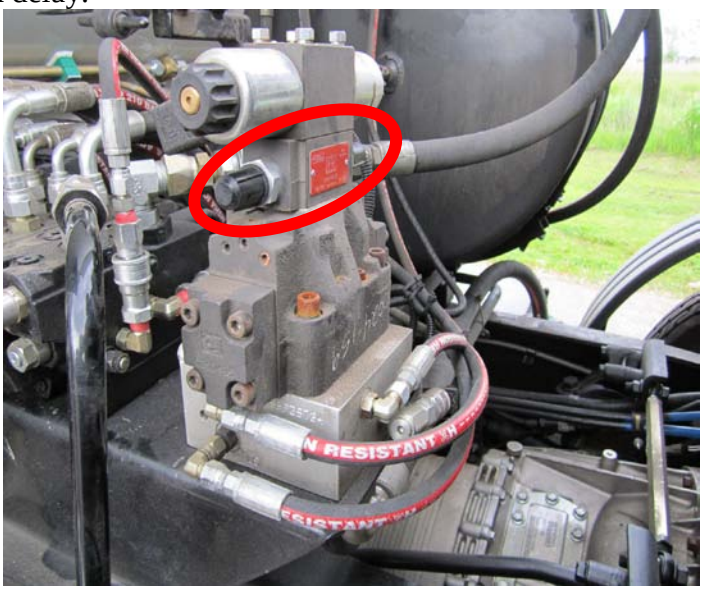
- Loosen the locknut and turn the adjustment screw clockwise (in) to raise the packer pressure, or counter-clockwise (out) to lower the packer pressure.
- Tighten the locknut and recheck packer pressures.
- Note that some models may have non adjustable relief cartridges. If packer pressures are not correct on these models, the relief cartridge must be replaced.

PACKER CHOKER VALVE

The packer choker valve assists in changing directions of the pendulum packer. The packer should have a delay of 1/2 second when changing direction. Adjustments may be necessary if there is a delay when the packer shifts from pack to retract, or retract to pack. Adjustments are made at the Allen screw beneath the caps located on each side of the assembly. The outer cartridge adjusts the pack to retract delay; the inner cartridge adjusts the retract to pack delay.



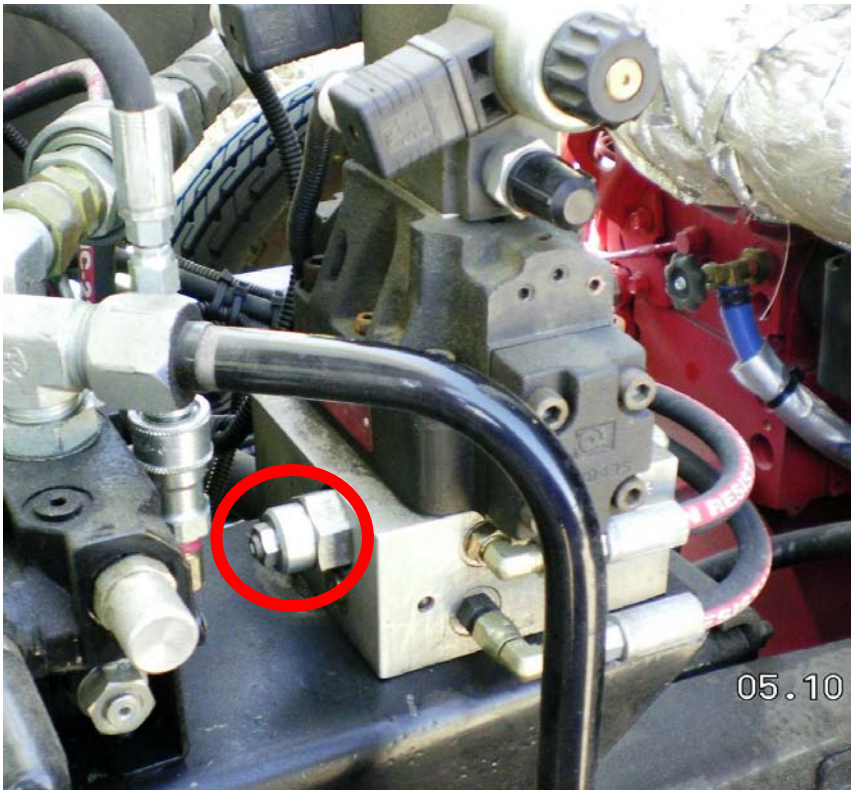
- Start the engine, turn on the pump and engage the auto pack.
- Remove the choker valve cartridge cap, loosen the lock nut and turn the Allen screw to adjust.
- Turning the screw counter-clockwise (out) will decrease the delay; to increase the delay, turn the screw clockwise (in).

PACKER COUNTERBALANCE VALVE

The packer counterbalance valve removes any chatter from the packer system while in the auto pack mode, and holds the packer from drifting when not auto packing.

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

Adjustment is only necessary if there is chatter in the packer operation or if the packer drifts when not engaged. The counterbalance valve is located on the bottom section of the packer valve.

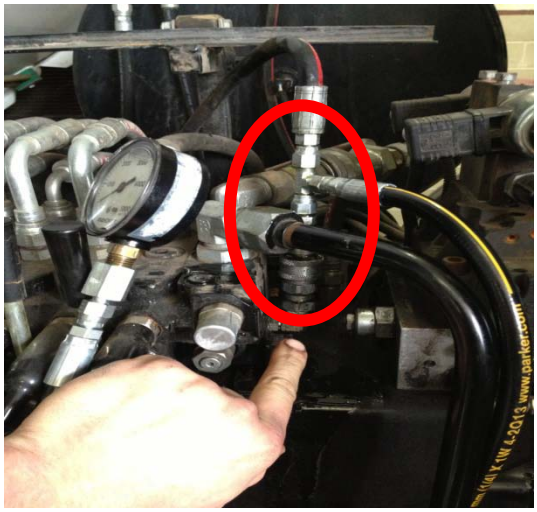


- Start the truck engine, engage the pump, and activate the packer retract to fully retract the packer; allow the control to go to neutral.
- Loosen the locknut and using an Allen wrench turn the counterbalance valve screw clockwise (in) until the packer just starts to drift down, then turn the adjustment screw counter-clockwise (out) 1/8 to 1/4 turn and tighten the locknut.
- Fine-tuning may be necessary. If the packer counterbalance is set too high, the packer will chatter during the pack cycle; if set too low, it will drift down from its fully retracted position.

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

MAIN RELIEF PRESSURE – ARM/BODY VALVE

- Shut down the chassis engine and perform proper lockout/tagout procedures.
- Locate the "LS" port on the arm/body valve, and install a 0 – 5,000 PSI pressure gauge by inserting a Tee fitting between the 90° elbow and hose.



- Raise the gripper, and hold the valve control in the gripper raise position after it reaches its fully raised position, and read the pressure on the gauge. The gripper raise pressure should be 2,700 PSI (±0 PSI).
- If the gripper raise pressure is not correct, it may be adjusted per the following procedure:
  - Locate the main relief cartridge on the lower right side of the arm/body valve.

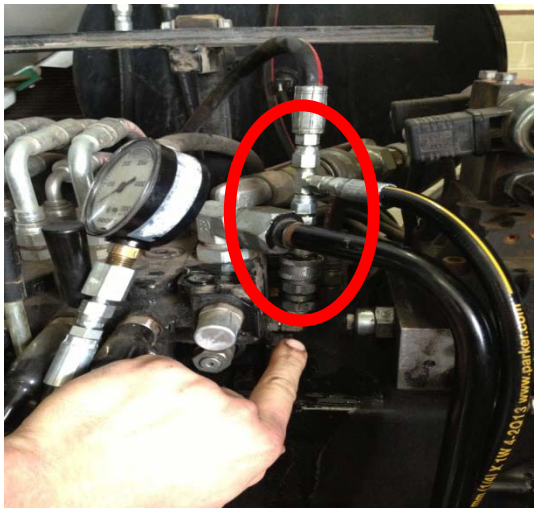
  - Using an Allen wrench, hold the adjustment screw and loosen the adjustment screw jam nut with an open-end wrench, by turning the nut counter-clockwise (out).

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

- Raise the gripper, and hold the valve control in the gripper raise position after it reaches its fully raised position.
- Turn the main relief adjustment screw clockwise (in) to raise the pressure, or counter-clockwise (out) to lower the pressure, until it is set at 2,700 PSI (±0 PSI).
- While holding the adjustment screw in position, tighten the adjustment screw jam nut by turning it clockwise (in).
- Recheck the main relief pressure to ensure it remains at 2,700 PSI (±0 PSI).
- NOTE: If the main relief pressure cannot be raised to 2,700 PSI, the circuit relief for the gripper raise may be set too low. Check and adjust the gripper raise pressure per the procedures listed for individual circuit relief adjustments.

INDIVIDUAL CIRCUIT RELIEF PRESSURE – ARM/BODY VALVE

- Shut down the chassis engine and perform proper lockout/tagout procedures.
- Locate the "LS" port on the arm/body valve, and install a 0 – 5,000 PSI pressure gauge by inserting a Tee fitting between the 90° elbow and hose.

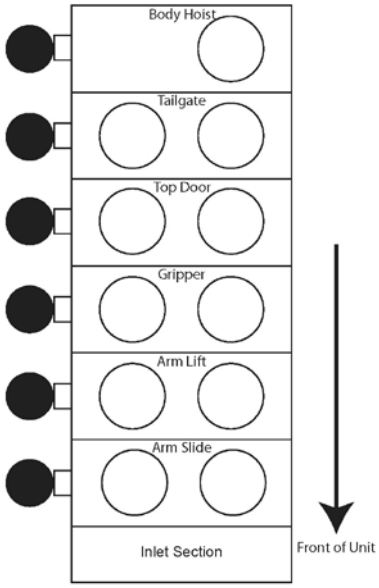


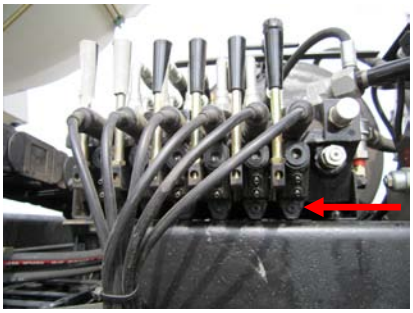
- Start the engine, engage the pump and operate each circuit, holding the control after it reaches it travel limit, and note the pressure.

Circuit	Function Pressure	Function Pressure
Body Hoist	Raise 2,300 PSI	Lower N/A
Tailgate	Raise 2,200 PSI	Lower 2,200 PSI
Top Door	Open 1,400 PSI	Close 1,400 PSI
Gripper	Open1,400 PSI	Close 1,400 PSI
Arm Lift	Raise 2,700 PSI	Lower 1,500 PSI
Arm Slide	Out 1,800 PSI	In 1,800 PSI

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

- Each function has an adjustable pressure adjustment on each side of its corresponding spool.





- Remove the o-ring cap plug.

- Turn the internal adjustment screw with an Allen wrench clockwise (in) to increase pressure, or counter-clockwise (out) to decrease pressure.

Alley Gator Hydraulic Pressure Checkout and Adjustment Procedure

- After setting the pressure, visually inspect the o-ring on the cap plug and reinstall it in the valve body.