

Maintaining Your AutoGate Vertical Pivot Gate System

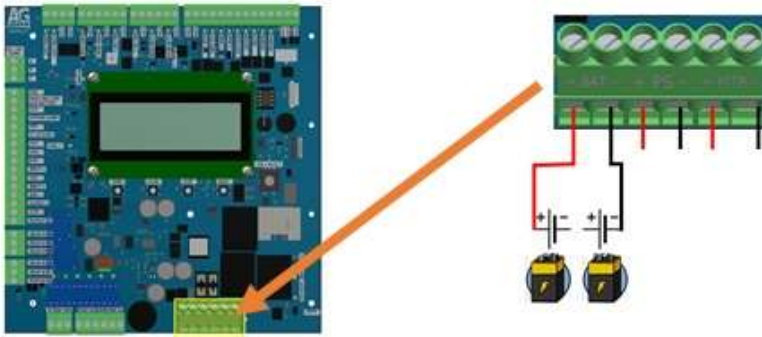
The basic electrical and mechanical systems require only minimum routine maintenance. The following items should be checked and serviced periodically depending on amount of use. Each item below has supporting illustrations and/or instructions in this manual. Contact AutoGate for any questions or issues.

Maintenance is important to any gate system and can affect safety, warranty, quality operation, and lifecycle of the system.

ITEM	RECOMMENDED MAINTENANCE
Grease Linkage Assembly ("LUBRIPLATE 'R' LOW TEMP" Grease)	10,000 cycles or 6 months
Grease all bearings: two (2) Operator Arm, four (4) Bullwheel Shafts	10,000 cycles or 6 months
Grease Chain Tension Bolt and Lube Chain & lightly coat springs (Use a non-evaporating cable and chain spray)	10,000 cycles or 6 months
Check belts for wear and tightness. (See page 47 for instructions)	Every 6 months
Charge voltage for batteries should be 27.5 VDC with batteries disconnected check at battery in maintenance menu.	Every 6 months
Check battery water level, use distilled water only (Not required on maintenance-free or AGM style batteries)	Every 6 months
Clean snow/ice from gate (Balanced correctly, gate will temporarily tolerate an additional 10 lb. of wt.)	As needed
Clean lenses on Photoelectric sensors/beams or Reflectors	As needed
Lubricate (Graphite Oil) all door latch, lock cylinders and mechanisms	Every 6 months
Check and verify proper operation of all External monitored entrapment protection devices. See page 35-36 and the external entrapment protection device(s) manufactures instructions.	Every month
Check and verify proper operation of the Internal (TYPE A) entrapment protection device (LPS) by walking to the middle to end of the gate and stop the gate, it should reverse.	Every month
Check gate balance (see page 49)	Four months after install, then annually
Check to make sure all WARNING signs are still displayed	Every month

CHECKING THE CHARGING SYSTEM

Shut off the **DC Power** switch. Measure the terminals at the bottom of the Genesis that are marked **Batt +** and **Batt -** . This is the charging voltage. It should measure approximately **26.5VDC**. Now measure each individual battery. They should be around **13VDC**. Next measure across the two batteries, you should get approximately **26 VDC**.



CHARGING SYSTEM SETTINGS

Batt: Float Charge
>PWR SUPPLY: Normal
Batt V Check Freq:
50 Cycles

Battery Status:

Float: When battery is at full voltage. It is not being charged.

Bulk: Battery is in charging mode.

Absorption: Batteries are low, switches to charging

Power Supply:

Normal: (Default) Standard power supply

Charge: For retrofitting older systems only and replaces the original factory transformer.

Solar: Used when you have Solar Panels.

>Low Battery Action
No Action
No Main Power Act.:
Run on Batteries

Low Battery Action:

Default is **NO ACTION** – Gate will run until the batteries are depleted.

Fail Safe – Gate will fail **OPEN**.

Fail Secure – Gate will fail **CLOSED**.

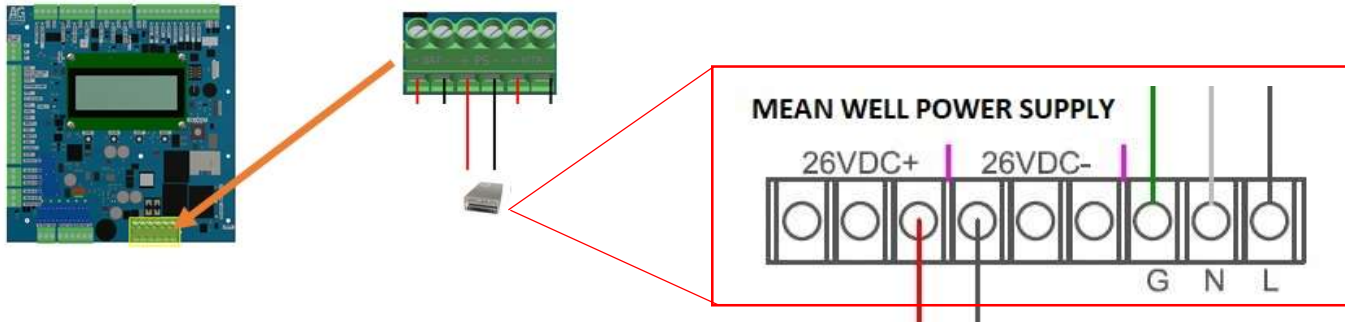
No Main AC Power Action:

Run on Batteries – Loss of AC power the gate will run on batteries.

Hold OPEN – Loss of AC power the gate will lock OPEN.

CHECKING THE LINE VOLTAGE

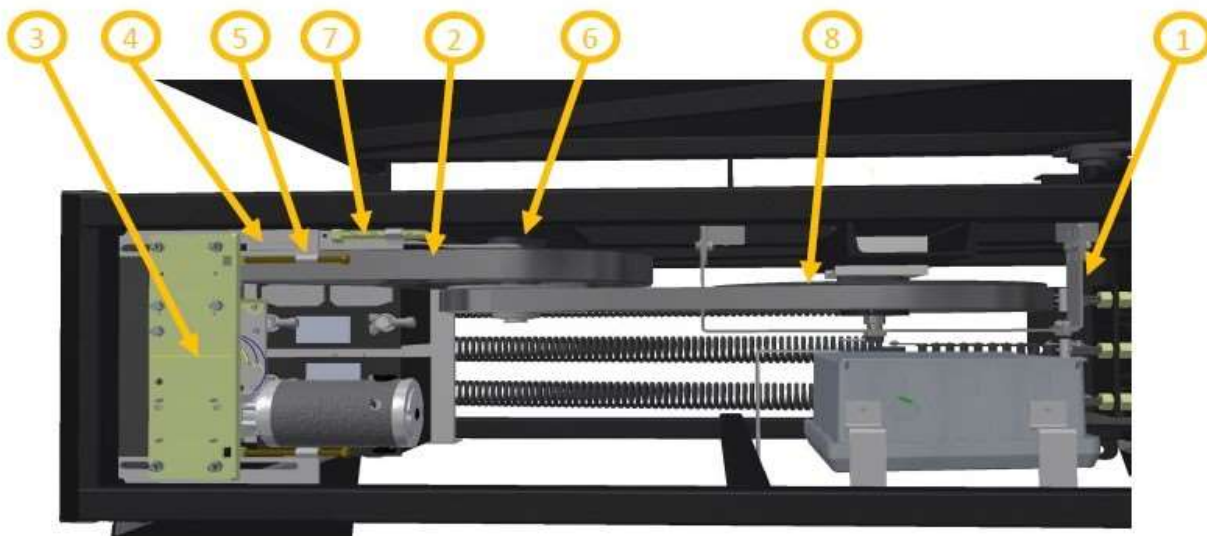
Measure the incoming **AC Line Voltage** to the operator at the service plug. This should be 110VAC. Then measure the output of the power supply. In a **VPG2490** system this should be adjusted to **26.5 VDC** with the potentiometer on the power supply next to the terminal strip. In a **VPL24** or **VPG24** system it should measure approximately **29.5VDC**.



BELT TIGHTENING

1. Crack the **FLANGE BEARING bolts** loose on the middle set of pulleys.
2. Tighten the **MIDDLE FORCING SCREW** to tighten the **GATE DRIVE belts**. Correct tightness is 10lbs. of pressure applied at the center of belts with a 1/4" deflection.
3. Re-tighten the **FLANGE BEARING bolts**.
4. Loosen the **(4) CARRIAGE bolts** that secure the **GEAR MOTOR** bracket to the **SIDE SLIDE** plates.
5. Tighten the **(2) GEAR MOTOR FORCING** screw to achieve 1/4" -1/2" deflection with 10lbs. of pressure applied at the center of the belts.
6. Re-tighten the **(4) CARRIAGE bolts** to secure the **GEAR MOTOR** bracket to the **SIDE SLIDE plates**.

- | | |
|---------------------|------------------------------|
| 1. Stiffener Plate | 5. Gear Motor Forcing Screws |
| 2. Motor Drive Belt | 6. Flange Bearing Bolts |
| 3. Gear Motor | 7. Middle Forcing Screw |
| 4. Side Slide | 8. Gate Drive Belts |

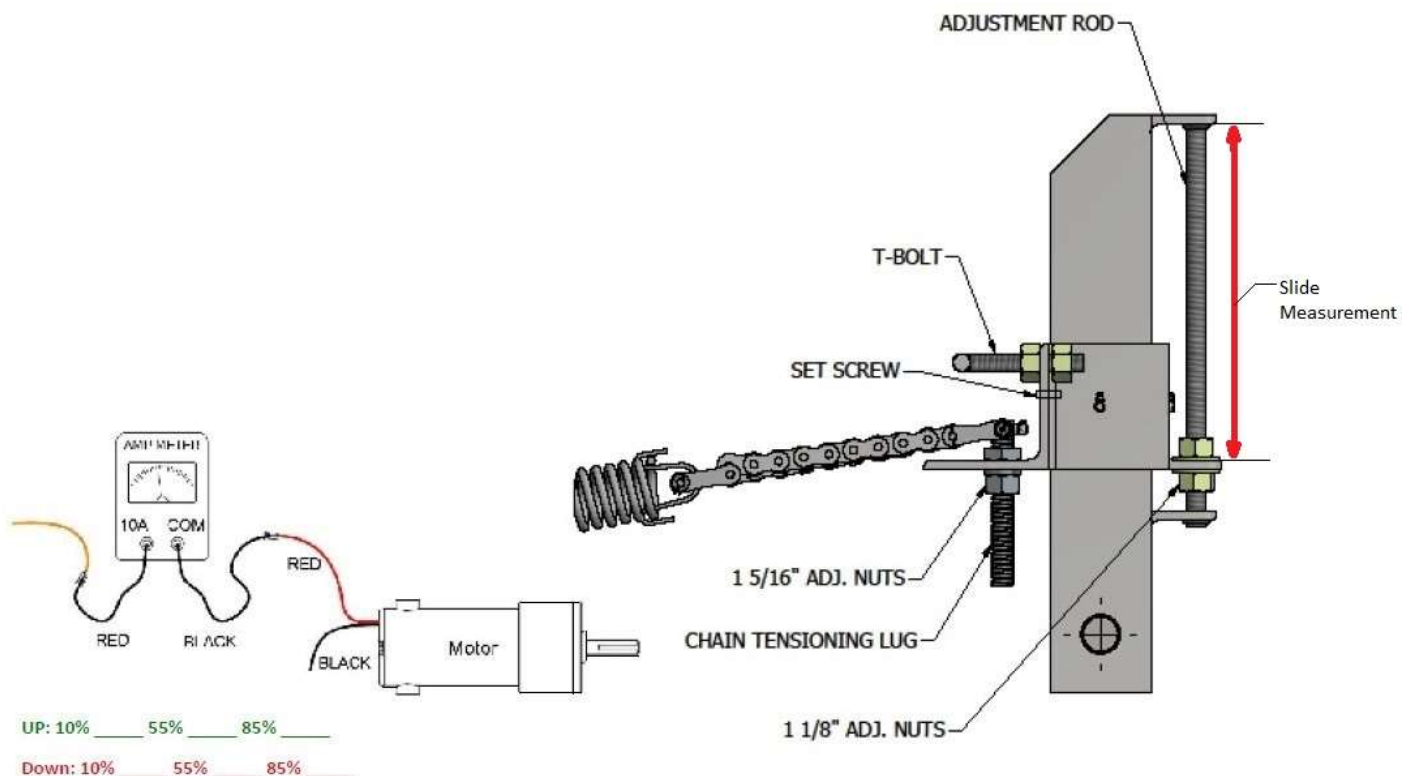


CHECKING THE BALANCE

1. Connect AMP meter in series by removing the wire nut from the **RED** motor lead.
2. Cycle gate up and down recording the **highest** amperage in the space provided and adjust as necessary. Highest **UP** and **DOWN** readings should not exceed a 1 AMP difference. For example: If your highest reading is 6.5 UP and 6.0 DOWN, that would be acceptable. *Unacceptable would be 3.1 UP and 8.0 down.*

ADJUSTING:

1. Loosen the set screws on the **SLIDE ASSEMBLY** as well as the 1 1/8" nuts on both sides (top & bottom) of the **SLIDE ASSEMBLY ANGLE**.
2. Only adjust the nuts 3 to 4 turns (1/4") at a time and check your amperage readings after each adjustment. **NOTE:** your amps in the **OPEN** mode should be approximately .75 (3/4) amp higher than the **CLOSE** amperage.
3. If the gate opens too slow and is drawing high amps, raise the **SLIDE ASSEMBLY** and recheck. If the gate will NOT close, lower the **SLIDE ASSEMBLY** and re-check. If your gate stalls in either direction, you have over-adjusted. Back off the last adjustment and re-check.
4. If the gate is slow starting to close from the **OPEN** position, increase the length of the T-Bolt (s).
5. Tighten Set Screws and 1 1/8" nuts.



Lubricating the Grease Fittings

