

THE GENIE ADVANTAGE

Genie® Lithium Battery for Slab Scissors



Built for the Aerial Industry, designed to last in extreme environments

- ⦿ Genie is launching Lithium-Ion batteries for all GS slab scissor models (except micro, GS-4046 and GS-4655). The option is released for orders on today except GS-3232 (later 2023).
- ⦿ Lithium batteries save time and money by eliminating maintenance such as battery watering and battery replacement. It also free-up operators' time to service other products.
- ⦿ Extensively tested in all weather conditions. Genie® Lithium-Ion batteries improve jobsite productivity in hot and cold environments.
- ⦿ 2.5 years of development and extensive testing led to a battery design specifically for MEWPs and UL* certified against fire, electric shock, explosion.

Value Proposition

ZERO

BATTERY
MAINTENANCE

5Y

BEST IN CLASS
LITHIUM BATTERY
WARRANTY (YEARS)

UL*

TESTED &
CERTIFIED

#1

IN EXTREME
TEMPERATURE
PERFORMANCE

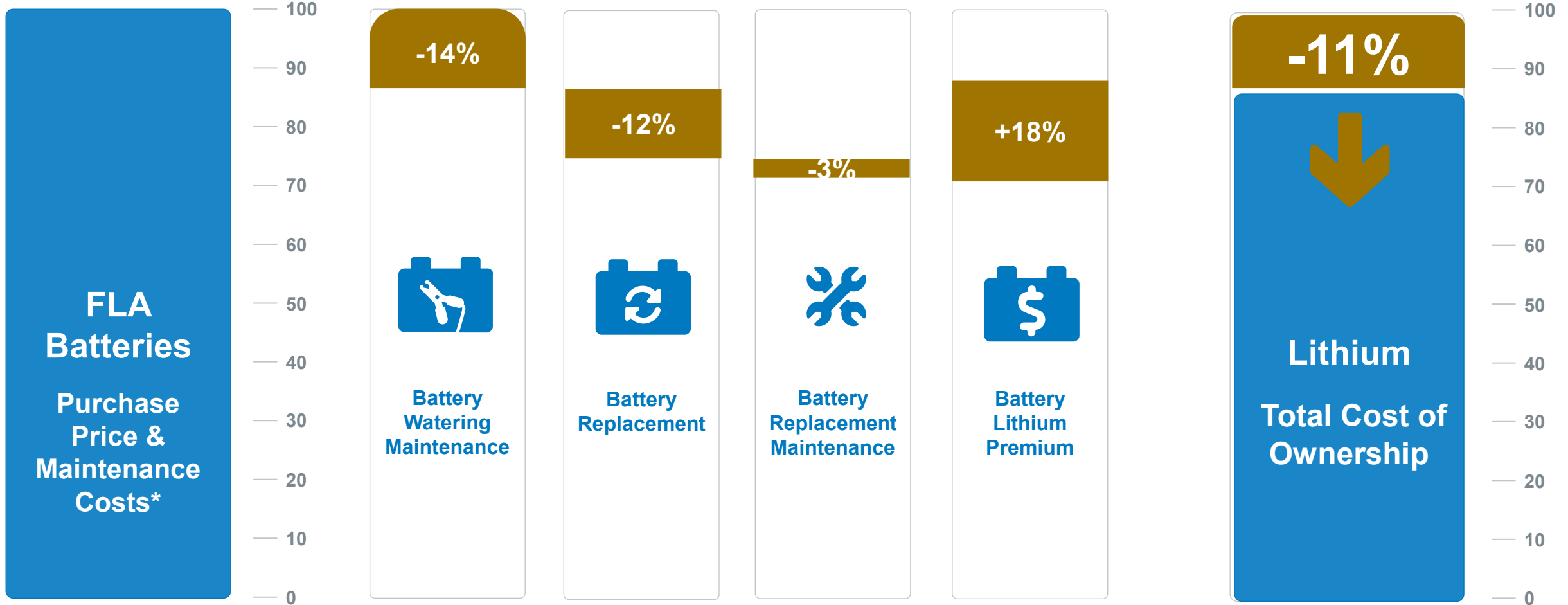


* Abbreviation for *Underwriter Laboratories*: a safety certification company and brand globally recognized for product safety standards. UL certified products have been successfully tested against a risk of fire, electric shock, and explosion during use and transportation.

Genie® Lithium-Ion battery

MAINTENANCE COST REDUCTION

E-DRIVE
+LITHIUM ION



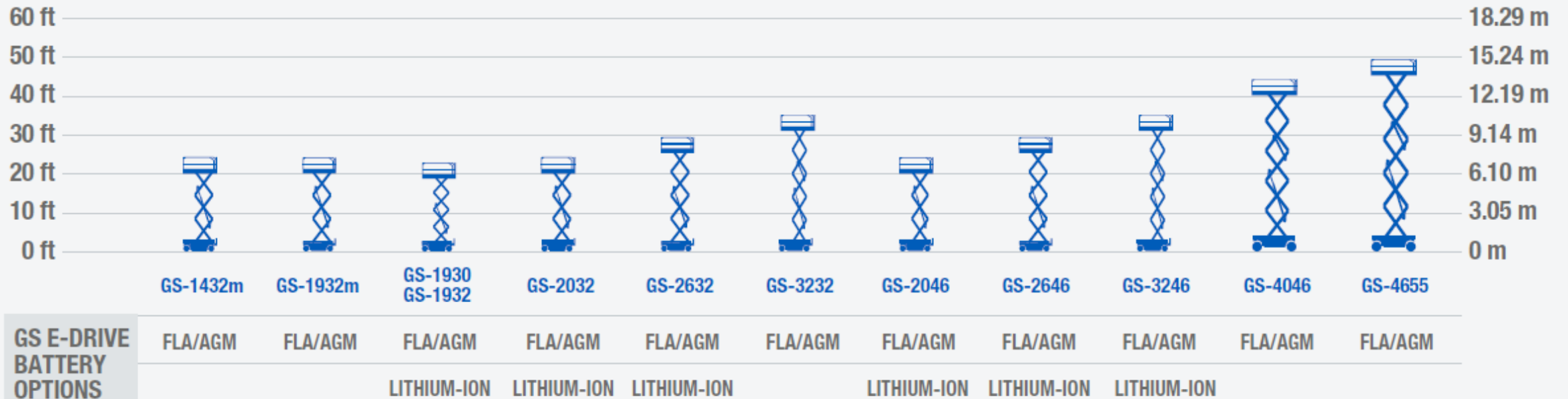
* Estimate costs based on Genie study from feedback of major rental companies globally: 7 years rental life, 2h Maintenance & Watering/ year, 2.5 battery replacement during rental life.

Genie® Lithium-Ion battery

OUR E-DRIVE SCISSOR LIFT FAMILY OFFER

E-DRIVE
+LITHIUM ION

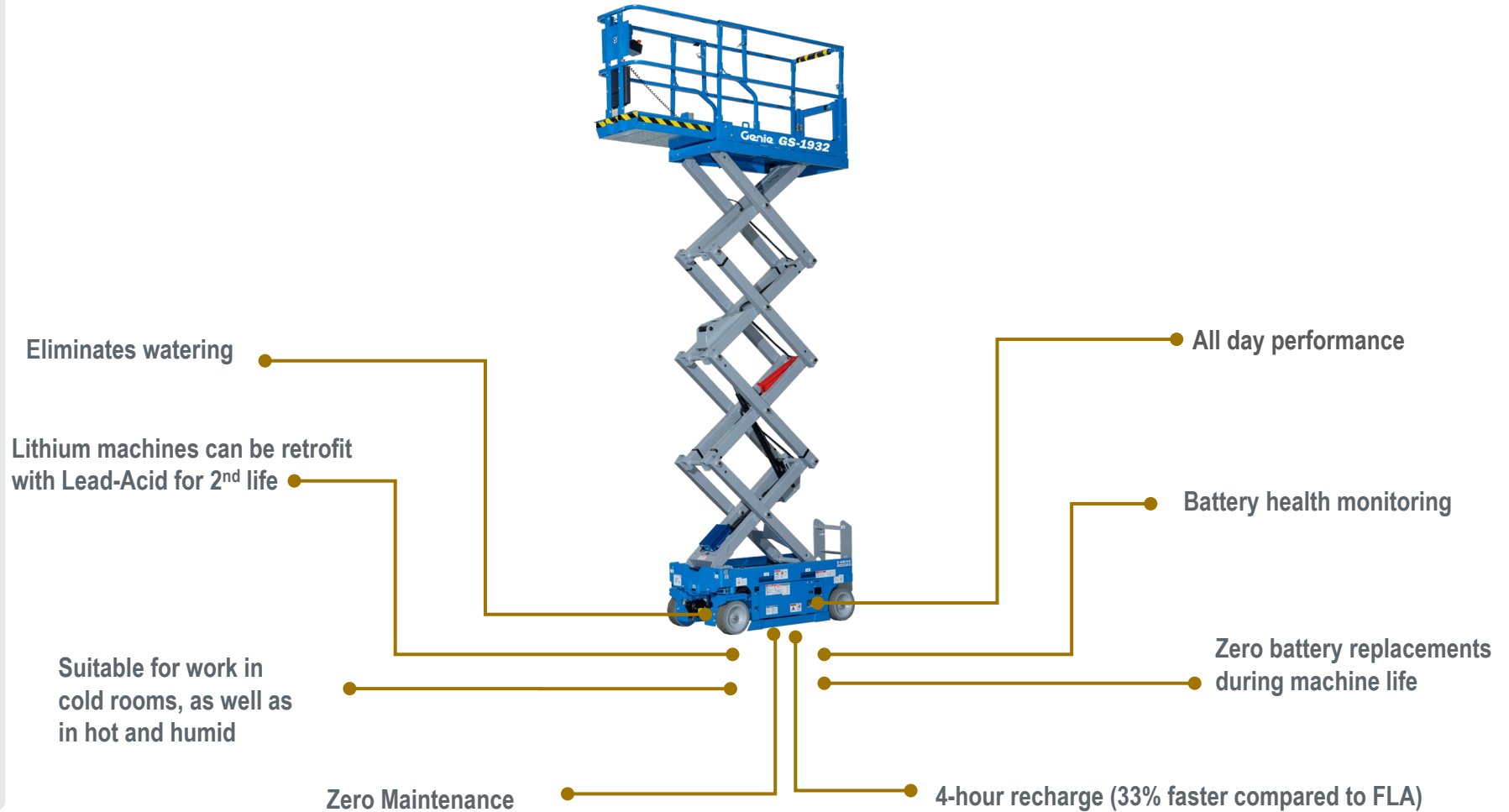
OUR E-DRIVE SCISSOR LIFT FAMILY



**GS E-DRIVE
BATTERY
OPTIONS**

Main Applications

- General construction
- Infrastructure maintenance
- Extreme weather jobsites
- Overhead signs
- Warehouses
- Hospitals
- Datacenters
- Rail
- Retail
- Production: Industrial manufacturing, Chemical processing, Food processing



Genie® Lithium-Ion battery

SLAB SCISSORS FACTORY-FIT OPTION

Options & Accessories



GS-1930 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-1932 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-2032 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-2632 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-2046 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-2646 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-3246 E-Drive

[OPEN SPEC FROM WEBSITE](#)



GS-3232 E-Drive

[OPEN SPEC FROM WEBSITE](#)

What differentiates us from the competition?

- ⌚ Indoor/outdoor all-weather performance and extreme temperatures
- ⌚ Battery health monitoring
- ⌚ Long lifespan and low TCO
- ⌚ Fast charge times
- ⌚ UL Certified for product safety
- ⌚ IP67 Sealed
- ⌚ Maintenance-free; no battery watering
- ⌚ Partial charges won't damage the battery
- ⌚ 5-year warranty
- ⌚ Zero battery replacement
- ⌚ Retrofit lithium machine for 2nd life with FLA batteries



What should I remember?

- ⤴ Maintenance-free; no battery watering
- ⤴ Free up technicians to fix other equipment
- ⤴ Zero battery replacements
- ⤴ Save an additional 11% in TCO
- ⤴ Partial charges won't damage the battery
- ⤴ IP67 sealed protects from dust and water

ZERO

BATTERY
MAINTENANCE

5Y

BEST-IN-CLASS
WARRANTY (YEARS)

- ⤴ Enjoy peace of mind with a 5-year warranty regardless of charge/discharge cycle
- ⤴ Expected 10-year battery life
- ⤴ Ability to track battery performance with Genie Lift Connect™ Telematics.
- ⤴ Fully tested and certified for outdoor and all-weather

- ⤴ Meets the safety requirements for hybrid and light electric vehicles
- ⤴ Safely withstand simulated abuse conditions and prevent operator exposure to hazardous materials
- ⤴ Tested and Certified against the risk of fire or explosion
- ⤴ Certified for air, sea, rail, roadways transport

UL

TESTED &
CERTIFIED

#1

IN EXTREME
TEMPERATURE
PERFORMANCE

- ⤴ Faster charge time (33%)
- ⤴ Same performance and power regardless of hot/cold weather condition
- ⤴ Optimized temperature performance
- ⤴ Extreme cold and hot temperature (-20F/29C & 120F/49C)



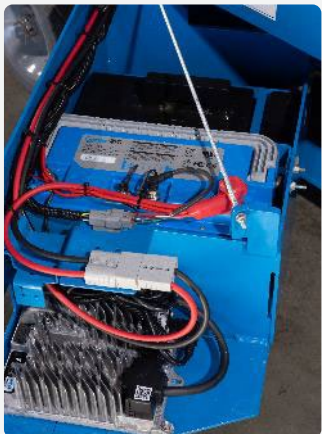
What is the battery longevity? Per day? Per life?

It is variable depending on operation, but just like our FLA machines, operators can expect at least one full work shift per day on a single charge. Recharge your Genie Lithium-Ion battery in just 4 hours, 33% faster than a standard FLA battery. Because partial charges won't damage the Lithium-Ion battery, operators can also charge during breaks.



Are replacements available? Can I change lithium to standard lead acid battery for 2nd life option?

Yes, in addition to the 5-year warranty and the 10+ year expected lifetime, replacement batteries will be available if needed. You can change lithium battery to standard lead acid battery and remove the counterweight, but you can't do vice versa.



Is there enough counterweight to offset the lightweight battery?

Yes, we added enough counterweight to offset the weight difference between Lithium-Ion and FLA, keeping the machine's overall weight the same to ensure machine stability. The weight of the Lithium-Ion battery is neither an advantage nor a disadvantage.



Any special recycling requirements for Lithium? Any plans for end-of-life disposal? Environment impacts?

There are recycling infrastructures for Lithium-Ion globally that our supplier (covered for whatever regulations) can also manage. However, disposal is the responsibility of the machine owner. No watering is needed, nor "leaks" of electrolyte from the Li-ion battery pack which is more eco-friendly than other batteries.



What can eventually reduce the life cycle of a Lithium-Ion battery?

The life cycle is dependent on how much use the battery gets. What makes this Lithium-Ion battery different from an FLA or AGM battery is its smart battery management system, which keeps the battery “healthy”. This system that ensures the battery is being properly charged, temperature controlled, etc.



Can we convert existing E-drive or Hydraulic FLA scissors into Lithium?

No. Unfortunately, at this time, we cannot retrofit any existing scissors that have already been manufactured with FLA batteries to Lithium-Ion batteries, as there are additional components that must be added to the machine, including additional counterweights and a different harness in addition to the battery. This would make field retrofits complicated.



How do we know that this battery is suited for MEWP use?

Genie intentionally and purposefully developed our Lithium-Ion battery, in collaboration with our supplier, to ensure it meets the unique needs of our equipment. And then we tested it extensively for durability and reliability to ensure it would hold up to performance and jobsite, even in extreme temperature conditions. We also obtained UL certification.



How long did Genie spend testing it?

Genie’s new Lithium-Ion batteries have been specifically designed to meet the needs of MEWP owners and operators and are UL certified. Our engineers have spent the last 2.5 years testing the battery in a variety of conditions and circumstances meant to replicate real-world jobsite usage, including extreme temperature conditions.

Genie® Lithium-Ion battery

SLAB SCISSORS FACTORY-FIT OPTION



Performance and Runtime comparison with other FLA and Li-ion?

Genie Lithium-Ion and FLA E-Drive scissor lifts offer 30% more runtime per charge and better torque. One of the biggest benefits of Genie Lithium-Ion is that our solution has been specifically designed for the equipment it is powering, extensively tested and UL certified. Backed back a 5-Y warranty, customers can feel confident in its quality, safety, reliability, durability.



Any special training requirements for technicians?

Currently, there is no special training needed for batteries in general, and Lithium-Ion is not an exception. Troubleshooting such as fault code, re-set instruction, set-up of the battery, disconnected harness, etc. will be included in the updated Service Manual.



What about waterproofing testing. Is the battery IP certified?

During field testing, we learned that we had to take our 'weatherproofing' to the next level so it could withstand pressure washing. Not only the Genie Lithium-Ion battery is fully-sealed IP67 (water and dust protected) but we also reviewed the design and improved the torque settings on critical joints to avoid water contamination.



What is the support plan for parts and service?

The Genie global parts team has developed a support plan for Lithium-Ion scissors, incl. stocking batteries and parts at each of our global warehouses so that they are local to our customers. Those parts are for service support only as we do not sell Lithium-Ion battery as aftermarket nor retrofit kits. Parts team will be reviewing open parts orders regularly.

Lithium-Ion Part#: 1305193GT

Genie® Lithium-Ion battery

SLAB SCISSORS FACTORY-FIT OPTION

What is the difference in a cold weather environment between a scissor with an FLA battery and a Lithium-Ion battery?

When in use, electric machines with a standard FLA battery usually generate enough heat in the battery to continue working. However, most people aren't continuously lifting or driving; they're stopped and doing work, and the FLA batteries get colder. When the FLA battery get colder, it delivers less energy, which means the operator needs to take a break and move the lift into a warmer environment. Genie Lithium-Ion batteries have built-in heaters that maintain the proper temperature, even when the scissor lift is stationary, which allows the operator to work continuously, without taking a break to warm up the battery. This is a real productivity in cold environment.



How does our Lithium-Ion battery solution compare with the competition? What about compared with our own FLA option?

Genie Lithium-Ion batteries have been designed specifically for Genie slab scissors to offer similar machine performance and the appropriate runtime per day to satisfy most customer applications. With an expected battery life of at least 10 years and a five-year warranty, equipment owners can feel confident in the battery's quality and longevity. With Lithium-Ion battery, owners will benefit from less annual maintenance and won't have to replace the battery as often.

Genie GS E-Drive Lithium-Ion scissor lifts can be recharged in just 4 hours, which is 33% faster than a standard FLA battery, and partial charges won't damage the Lithium-Ion battery. This allows operators to charge a lift during breaks or over lunch in the event the machine didn't get charged the night before, or if it is being used for a second shift.

No special station is required; Genie E-Drive Lithium-Ion scissor lifts can be charged using a standard wall charger. If you leave the battery plugged in overnight, the battery (power) management system will help cut off power once the battery has reached 100% charge.