



### AFTER SALES SUPPORT

LiuGong has a strong network of sales & services offices at key locations in India. Our dealer guarantees timely support and maintenance of machine service round the clock.

### CREATED IN INDIA. CREATED TO LAST.

Tapping the global market, LiuGong announced its first overseas expansion with an estimated capital of Rs. 30 millions in the form of setting up a manufacturing base in India in 2009. With a sprawling 177,000 square meters lush green campus, LiuGong established a full-fledged manufacturing plant at Pithampur near Indore, often called as "Detroit of India" and the home of many international companies. The facility has a capacity of manufacturing 3000 equipments in a year.

The company supports the product lines with a growing network of more than 18 dealers and strategically located 55 touch points in 29 states. LiuGong fully supports the customers with a complete range of reliable construction machinery, through a wide range of network and strong after sales support.

- ★ Corporate Office
- Sales Office
- Dealer Outlet
- Manufacturing Plant

**Engine**  
**Gross Power**  
**Net Power**  
**Maximum Digging Depth**  
**Standard Bucket Capacity**  
**Operating Weight**

Cummins QSL 9  
 214 kW (287 hp) @ 2,100 rpm  
 202 kW (271 hp) @ 2,100 rpm  
 6,730 mm  
 1.9 m<sup>3</sup>  
 35,800 kg

# 939E

## EXCAVATOR



Always a LiuGong dealer near you.

Corporate Office:  
 82, Okhla Phase III, New Delhi- 110020, Tel: 011-47272200  
 india@liugong.com

Manufacturing Plant:  
 Plot No. 163, Industrial Area, Sector-III, Pithampur  
 Dist.- Dhar, Madhya Pradesh- 454774, Tel: 07292-416700

[www.liugong.com/en\\_in](http://www.liugong.com/en_in)



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### TOUGH WORLD. TOUGH EQUIPMENT.



# UNBEATABLE RETURN ON YOUR INVESTMENT

LiuGong's **customer-driven** design and **quality-focused** engineering creates lasting value that will deliver to your bottom line.

## DEPENDABLE POWER

Unmatched performance driven by the Cummins QSL9 Engine, maximizes torque output with more power and breakout force at lower engine speeds.

## IPC (INTELLIGENT POWER CONTROL)

This system ensures the mechanical, electrical and hydraulic systems work in perfect harmony for efficient, precise control.

## AUTO-IDLE SPEED FUNCTION

Hydraulic request signals detect activity, decreasing and increasing engine speed as required. Power is supplied only as when needed, achieving optimum fuel efficiency.

## VERSATILITY

Options for auxiliary hydraulic piping include bi-directional variable high flow line, an additional line for rotating attachments and also a single acting line. The quick coupler further ensures you get the most out of your machine by easily switching between a wide range of attachments to suit your needs.



## BOOM AND ARM

Boom and arm structures are designed for long-term durability and resistance to bending and torsional stresses. Large cross-sectional areas incorporate one-piece steel castings to provide improved strength and standard rock guard plates and vertical guards further protect the arm in rocky conditions.

## UNDERCARRIAGE

The X-type reinforced frame long track beam and crawler system delivers unmatched stability and durability.

## GPS

Track and monitor your machine with the help of advanced GPS System anywhere anytime.

## PARTS

Using genuine LiuGong parts is the key to keep your costs low and your machine in top working order. Our extensive support network is always there when you need it, to maximize your business profitability.

## AFTER SALES SERVICE

With over 2,650 outlets, you can feel confident that LiuGong dealers and regional offices will be there to support you with training, service maintenance and expert advice for the life of your machine.



# EFFICIENCY, PRECISION & VERSATILITY

LiuGong E series excavators deliver the **perfect balance** of performance, precision and quality. The 939E model is powered by the latest generation, low emission Cummins QSL 9 engine, with enhanced power output, **improved breakout force** and faster cycle times.

## A POWERFUL ENGINE

The 939E's Cummins engine delivers the greatest possible fuel economy without compromising on power.

The QSL 9 engine employs a proven cooled-EGR system and the latest Cummins patented Turbocharger, which precisely adjusts the airflow delivered to the engine increasing performance and improving fuel economy.

## ADVANCED HYDRAULIC SYSTEM

LiuGong excavators, negative flow of the hydraulics optimizes the main control valve. This helps to minimize the cycle time of the cylinders, leading to improved efficiency and a higher rate of work completed.

The hydraulic system works efficiently in transferring engine power to the ground providing widespread control and precision.

## INTELLIGENT POWER CONTROL

LiuGong's advanced Intelligent Power Control (IPC) system delivers the power you need, as when required, ensuring powerful performance, without excess fuel consumption.

The new-generation computer-aided IPC system harnesses the mechanical, electrical and hydraulic systems of the 939E to work in perfect harmony for efficiency, precision and control. When the working load increases, engine power and hydraulic pump flow respond to meet the demands of the job.

### ENGINE WORK MODES

LiuGong's six selectable working modes give you full control of the machine and enhanced performance under various operating conditions:

Power

Economy

Fine

Lifting

Breaker

Attachment

## AUTOMATED FUNCTIONS

The 939E maximizes fuel economy by regulating its idle speed. If for just one second there is no hydraulic request signal detected from the joystick, the engine speed is automatically dropped by 100 RPM. If no activity is detected over three seconds the engine speed will decrease to idle. As soon

as the system detects the hydraulic signal once more, the engine will immediately return to the previous throttle speed setting.

The engine's automatic warm-up system brings it up to operating temperature quickly, further improving fuel consumption, reducing emissions, and maximizing uptime.



# DESIGNED TO GET MORE DONE

The 939E is designed **get more done** in less time. Featuring a stronger boom arm and bucket breakout force, greater hydraulic flow, higher swing speeds and improved cycle times, this excavator will **power through any task** in any terrain.

## POWERFUL PERFORMANCE

The Cummins QSL 9 engine produces net power of 202 kW (271 hp). LiuGong has harnessed this power for the six working modes of the 939E excavator. Perfectly match these work modes to the job hand and even the least experienced of the operators will find that can work faster and complete more in less time.

## OPTIMIZED HYDRAULICS

Where intelligence meets brute force. Negative flow hydraulics direct the engine's power to ensure hydraulic pump flow continually adjustable for smooth, quick and efficient operation.

Engine power and hydraulic pump flow are automatically reset to adjust for the load attachment, helping to maximize the efficiency of the machine.

## QUICK-CHANGE ATTACHMENTS

LiuGong quick coupler and Power Latch tilt couple make changing over attachments like buckets, breakers and shears quick and simple which maximize your uptime.

## OPERATOR FRIENDLY ENVIRONMENT

Ergonomically designed controls, clear and informative displays, increased visibility, and exceptional comfort increases operator efficiency and safety. The easily accessible service points ensures important daily servicing and routine maintenance gets done.

## IMPROVED MACHINE DESIGN

The 939E's tough and reliable structure provides increased strength, reduced wear, and improved transmission of power to the ground drive.





# SAFETY YOU CAN COUNT ON

LiuGong's commitment to you includes an equal commitment to your **safety**. E-series excavators are equipped with all the necessary safety features to give you peace of mind and help you **focus** on the job in hand.

## SAFETY STANDARDS

LiuGong excavators are certified to meet European CE standards and meet ISO safety standards.

## ROLL OVER PROTECTION SYSTEM

The cab's high-strength ROPS ensures operator protection in a worst-case scenario.

## FALLING OBJECT PROTECTION SYSTEM

The choice of FallingObject Protection (FOPS) is an valuable addition to operator safety.

## ALL-ROUND VISION

The large glass surface area of the E-series cab, combined with the optional rear view camera, provides an extraordinary view of the 939E's surroundings. This ensures the operator is always aware of the immediate environment while adding LED work lights provides clearer vision on jobsites.

## SAFE ENTRY

Safety rails and well-positioned anti-slip tape on the upper part of the machine make it easier and safer during machine servicing.



# ALWAYS STRONG ALWAYS RELIABLE

The use of thick, high-tensile steel components, internal baffling and stress-relieved plates, make the structures on LiuGong E-series excavators **tough and durable**.

We guarantee the **quality and reliability** of our machines throughout the manufacturing process by conducting stringent tests and ultrasound inspections that detect defects well before they make it into production.



## BOOM & ARM

The boom and arm structure are designed with large cross-section a which supports and incorporates one-piece steel castings. This solid engineering guarantees long term durability and high resistance to blending and torsional stress.

Standard rock-guard plates and vertical guards protects the arm in rocky digging conditions and tough environments

## UPPER STRUCTURE

The upper structure is strongly reinforced by the use of H-beam in the high cross section of the main structure providing even weight distribution and hence increasing stability.

The platform's collision protection system has been welded into place to improve its strength, rigidity and overall service life.



## UNDERCARRIAGE

The high - strength undercarriage of the 939E incorporates a welded X- frame construction for long life durability and is designed to perform in the most challenging applications.

A long track beam and crawler system provides greater stability when using attachments for digging and truck loading. The result is outstanding strength and durability.





# ALL ROUND COMFORT

In the 939E cab, you're ensured to be in complete **comfort** with outstanding **visibility** all around. We understand how operators like to work and have designed the cab for **maximum comfort** and ultimate productivity.

## AT HOME IN THE CAB

The 939E's oversized cab is spacious and has all the key features to make excavator operation as safe and comfortable as possible, boosting operator efficiency shift after shift.

The E-series cab is designed to reduce noise and vibration, putting operator's comfort first. Convenient additions include cup holders, an AM/FM radio and MP3 player, refrigerated storage and personal luggage compartment. The cab is also fitted with a roof skylight that can be opened or closed as the operator chooses.

## ADVANCED CLIMATE CONTROL

An advanced climate control system creates the right environment in any weather, all year round, while dust is eliminated thanks to the complete sealing of the pressurized cab.

## ERGONOMIC EXCELLENCE

LiuGong has carefully designed the cab controls to be perfectly positioned, right where you need them.

All hand and foot controls are precisely positioned, and within easy reach. In addition, the multi-adjustable, air-suspension seat has an option for electric heating.



## LARGE LCD MONITOR

The easy-to-read, full-color LCD monitor displays all the critical information you need about the machine, including working mode, hydraulic oil temperature, hydraulic pressure and service intervals.

## BROAD VISION ALL ROUND

The cab design features a large glass surface for exceptional jobsite visibility. With the addition of an optional rear-view camera, the operator can easily see safely all around the 939E.





# SERVICING MADE EASY

LiuGong excavators have been **specifically designed** for easy service and maintenance in even the most remote and harsh environments.

## PRACTICAL SERVICING

If servicing is easy, it gets done. Optimal design and layout of all maintenance features makes it easy for the operator to complete essential servicing tasks.

An automatic greasing system makes daily maintenance easy, helping to lower maintenance costs and improve machine productivity. The automatic system improves bearing life and reduces repairs by delivering frequent and exact amounts of grease to each bearing.

The 939E is designed with easily accessible service points:

- Easily visible hydraulic oil level gauge
- Accessible, grouped filters
- Easy to replace A/C filter next to the cab door
- Maintenance free air filter

## ON BOARD MONITORING

Through the LCD display, the operator can easily check oil temperatures and pressure levels, receive service interval alerts and access to other information that contributes to proactive maintenance and servicing of the machine.



# PART OF YOUR PERFORMANCE



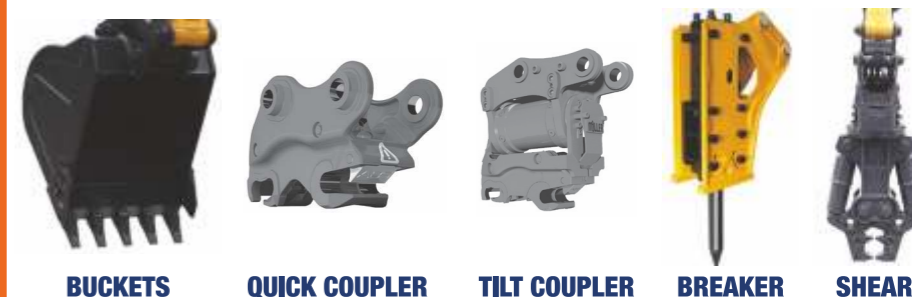
We know that confidence in your machine and those who support it is essential. So at LiuGong, we make sure we can always get what you need without delay, via our nine global parts depots, and the support of our network of local dealers across 130 countries worldwide.

LiuGong engineering sets high standards and all parts are rigorously tested to ensure they can meet the rigid quality specifications required for long lasting performance.

No matter where you are in the world, we can ensure fast and efficient parts support to keep you going.

## READY FOR ANY JOB

LiuGong provides a range of purpose designed attachments, hitches and tools for your 939E to give you increased versatility for any job site. In-cab dial-in hydraulic flow settings through the display screen optimizes the attachment performance.





# STANDARD EQUIPMENT

## ENGINE SYSTEM

- Cummins diesel engine, turbocharged, 6 Cylinder 4 stroke water cooled
- Auto-idle speed control
- Air filter with pre-cleaner
- Engine oil filter
- Pre-filter with water separator
- Radiator, oil cooler and intercooler
- IPC (Intelligent Power Control) System
- Engine overheat prevention system

## HYDRAULIC SYSTEM

- Power boost
- Boom and arm regeneration circuits
- Pilot oil filter
- Load holding valve
- Pilot control shut-off lever
- Swing with anti-reverse function

## OPERATOR STATION

- IPC (Intelligent Power Control) System
- 6-working mode selection system: Power Mode, Economy Mode, Fine Mode, Lifting Mode, Breaker Mode, Attachment Mode
- Highly pressurized and tightly sealed cab with all-around visibility, large roof window with slide sun shade, front window wiper, removable lower window
- Air conditioner, heater, defroster
- AM/FM Radio with MP3 audio jack
- Color LCD monitor with alarms, filter/fluid change, fuel rate, water temperature, work mode, fault code, working hour, etc
- Glass-breaking hammer
- Ashtray, cigarette lighter
- Cup holder
- Floor mat
- Storage box
- Front Cab Guard

## UPPERSTRUCTURE

- Rear view mirror (right & left side)
- 2 batteries
- One key for door locks, cap locks
- Fuel gauge
- Hydraulic oil level gauge
- Storage box
- Swing parking brake
- Boom lights
- Exterior lights integrated into storage box
- Roll-Over Protective Structures (ROPS)

## UNDERCARRIAGE

- 600 mm triple grouser track-shoes
- Full track frame under-guards (each side)
- Towing eye on base frame

## DIGGING EQUIPMENT

- 6400 mm boom
- 2600 mm arm
- 6500 kg counterweight
- 1.9 m<sup>3</sup> (SAE, heaped) bucket

# FEATURES TO ENHANCE YOUR PRODUCTIVITY



LED LIGHTS



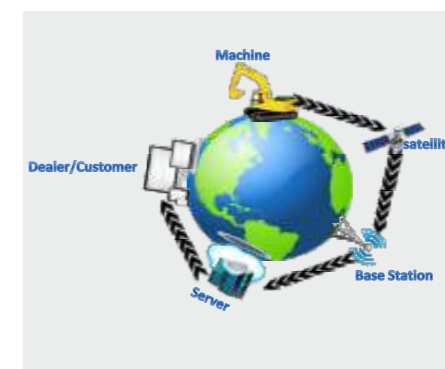
FUEL FILL PUMP



ATTACHMENT PIPING



FOPS & ROCK GUARD



GPS SYSTEM



SECURITY VALVE

# OPTIONAL EQUIPMENT

## ENGINE SYSTEM

- Electrical fuel refilling pump

## HYDRAULIC SYSTEM

- Security valves (2 on boom and 1 on arm)
- Control pattern change valve
- Hydraulic piping: Breaker & shear
- Slope & rotator
- Grapple
- Oil drain line
- Quick coupler
- Hydraulic quick coupler

## OPERATOR STATION

- Power outlet 24 V to 12 V converter
- 4 LED cab top lights
- Rotating beacon
- Rear view camera
- Air suspension seat
- Control joysticks with 2 switch & 1 proportional
- Falling-Object Protective Structures (FOPS)
- Safety net for front window
- Rain visor
- Travel alarm

## UPPERSTRUCTURE

- Crash-proof beam

## UNDERCARRIAGE

- 700 mm triple grouser track-shoes
- 800 mm triple grouser track-shoes
- 900 mm triple grouser track-shoes

## DIGGING EQUIPMENT

- 3200 mm arm
- 1.6 m<sup>3</sup> (SAE, heaped) bucket

# SPECIFICATIONS



ENGINE	
Emission Regulation	Tire 3 / Stage IIIA
Make	Cummins
Model	QSL 9
Gross output	214 kW ( 287 hp ) @ 2,100 rpm
Net output	202 kW ( 271 hp ) @ 2,100 rpm
Number of cylinders	6
Displacement	8.9L

**NEW GENERATION IPC SYSTEM**  
 The new generation IPC (INTELLIGENT POWER CONTROL) system ensure the mechanical, electrical and hydraulic system work in perfect harmony.  
 Six Working Modes: P- Power Mode | E- Economy Mode | F- Fine | L- Lifting | B- Breaker | A- Attachment

UNDERCARRIAGE	
Shoe Width	600 mm
Number of Shoes per Side	48
Number of Upper Rollers per Side	2
Number of Bottom Rollers per Side	9

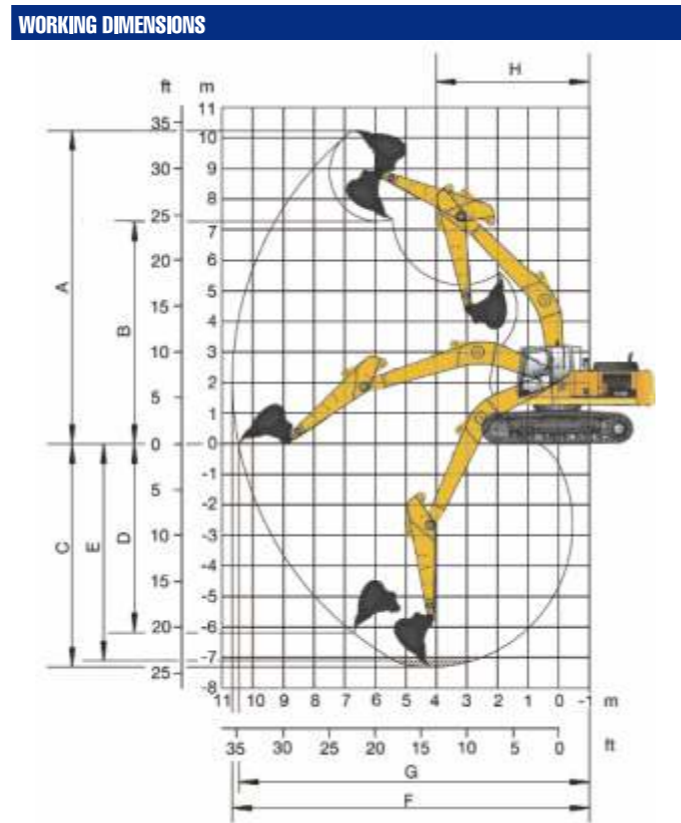
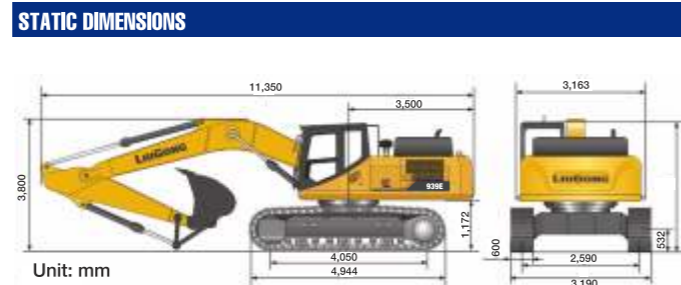
HYDRAULIC SYSTEM	
Main pump Type	Two variable displacement piston pumps
Max. flow	2 x 300 LPM
Pilot Pump	Gear pump
Implementation System Pressure	34.3/ 37.3 MPa
Travel System Pressure	34 .3 MPa
Swing System Pressure	26.2 MPa
Pilot System Pressure	3.9 MPa

SWING SYSTEM	
Swing Speed	10 rpm
Swing motor	Axial piston motor
Swing reduction	Planetary gear reduction
Swing bearing	Lubrication Grease bathed
Swing brake	Multi wet disc ( Spring applied Hydraulic released )

DRIVE & BRAKES	
Drive method	Hydrostatic
Drive motor	Axial piston motor
Reduction system	Planetary reduction gear
Max. Drawbar pull	320KN ( 32631 kgf )
Max. travel speed (high/low)	5.5 kmph /3.4 kmph
Gradeability	35 ° (70%)
Parking brake	Multi wet disc ( Spring applied Hydraulic released )

SERVICE CAPACITIES	
Fuel Tank	620L
Engine Oil	26L
Cooling System	35L
Hydraulic Reservoir	240L
Hydraulic System Total	450L

OPERATING WEIGHT	
Shoe Ground Pressure	66.8 kPa
Operating Weight	35,800 kg



Boom Length	6,400 mm
Arm Length	2,600 mm
Reference Bucket	1.9m <sup>3</sup>
A Dig Height	9,830 mm
B Dump Height	6,900 mm
C Dig Depth	6,730 mm
D Dig Depth of vertical	4, 430mm
E Depth of 8 bottom	6, 530 mm
F Max reach	10, 560 mm
G Reach at ground level	10, 350 mm
H Min Swing Radius	4, 700 mm
ISO Bucket Breakout Force	232 kN
ISO Arm Breakout Force	210 kN

BUCKETS	
Bucket Capacity	1.6-1.9m <sup>3</sup>

BUCKET SELECTION GUIDE						
Bucket Type	Capacity (m <sup>3</sup> )	Cutting width (mm)	Weight (kg)	Teeth pcs	6.4 m HD Boom	
					3.2 m Arm	2.6 m Arm
General Purpose	1.6	1520	1915	5	B	C
General Purpose	1.9	1660	2045	5	NA	B
Heavy Duty	1.6	1520	1915	5	C	D
Heavy Duty	1.9	1660	2045	5	NA	C

Maximum material density:  
 A. 1200-1300 kg/m<sup>3</sup>: Coal, Caliche, Shale  
 B. 1400-1600 kg/m<sup>3</sup>: Wet earth and clay, limestone, sandstone  
 C. 1700-1800 kg/m<sup>3</sup>: Granite, wet sand, well blasted rock  
 D. 1900 kg/m<sup>3</sup>: Wet mud, Iron ore  
 NA. Not applicable

The recommendations are given as a guide only, based on typical operation conditions. Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

- Do not attempt to lift or hold any load that is greater than these rated values at their specified load radius and height. Weight of all accessories must be deducted from the above lifting capacities.
- The above rated loads are in compliance with ISO 10567 Hydraulic Excavator Lift Capacity Rating Standard. They do not exceed 87% of hydraulic lifting capacity or 75% tipping load.
- Ratings at bucket lift hook.
- Lifting capacities are based on machine standing on level, firm and uniform ground.
- ※ indicates the load is limited by hydraulic capacity rather than tipping capacity.
- Operator should be fully acquainted with the operator's and Maintenance Instructions before operating this machine and rules for safe operation of equipment should be adhered to at all times.

## LIFTING CAPACITY

939E		Conditions								
A: Load radius		Boom length: 6400 mm								
B: Load point height		Arm length: 2600 mm								
C: Lifting capacity rating		Counterweight: 6500 kg								
Cf: Rated loads over front		Shoes: 600 mm triple grouser								
Cs: Rated loads over side										
Lift Point Height		4.5 m		6 m		7.5 m		Max Reach		
		Cf	Cs	Cf	Cs	Cf	Cs	Front	Side	A(m)
6 m	kg			※ 9319	※ 9319	※ 8627	6724	※ 8577	6128	7.9
20 ft	lbs			※ 20545	※ 20545	※ 19019	14824	※ 18909	13510	26
4.5 m	kg	※ 13273	※ 13273	※ 10410	9031	※ 9029	6558	※ 8553	5400	8.5
15 ft	lbs	※ 29262	※ 29262	※ 22950	19910	※ 19906	14458	※ 18856	11905	28
3 m	kg			※ 11712	8546	※ 9643	6327	8279	5031	8.8
10 ft	lbs			※ 25821	18841	※ 21259	13949	18252	11091	29
1.5m	kg			※ 12739	8161	※ 10186	6119	8139	4918	8.9
5 ft	lbs			※ 28085	17992	※ 22456	13490	17943	10842	29.1
0	kg	※ 17677	11726	※ 13154	7955	10155	5990	8383	5037	8.6
0	lbs	※ 38971	25851	※ 29000	17538	22388	13206	18481	11105	28.3
1.5 m	kg	※ 16749	11784	※ 12835	7919	※ 10096	5975	※ 9084	5453	8.1
5 ft	lbs	※ 36925	25979	※ 28296	17458	※ 22258	13173	※ 20027	12022	26.6
3 m	kg	※ 14900	11994	※ 11580	8044			※ 9076	6378	7.3
10 ft	lbs	※ 32849	26442	※ 25529	17734			※ 20009	14061	23.8
4.5 m	kg	※ 11474	※ 11474					※ 8535	※ 8535	5.9
15 ft	lbs	※ 25296	※ 25296					※ 18816	※ 18816	19.3

