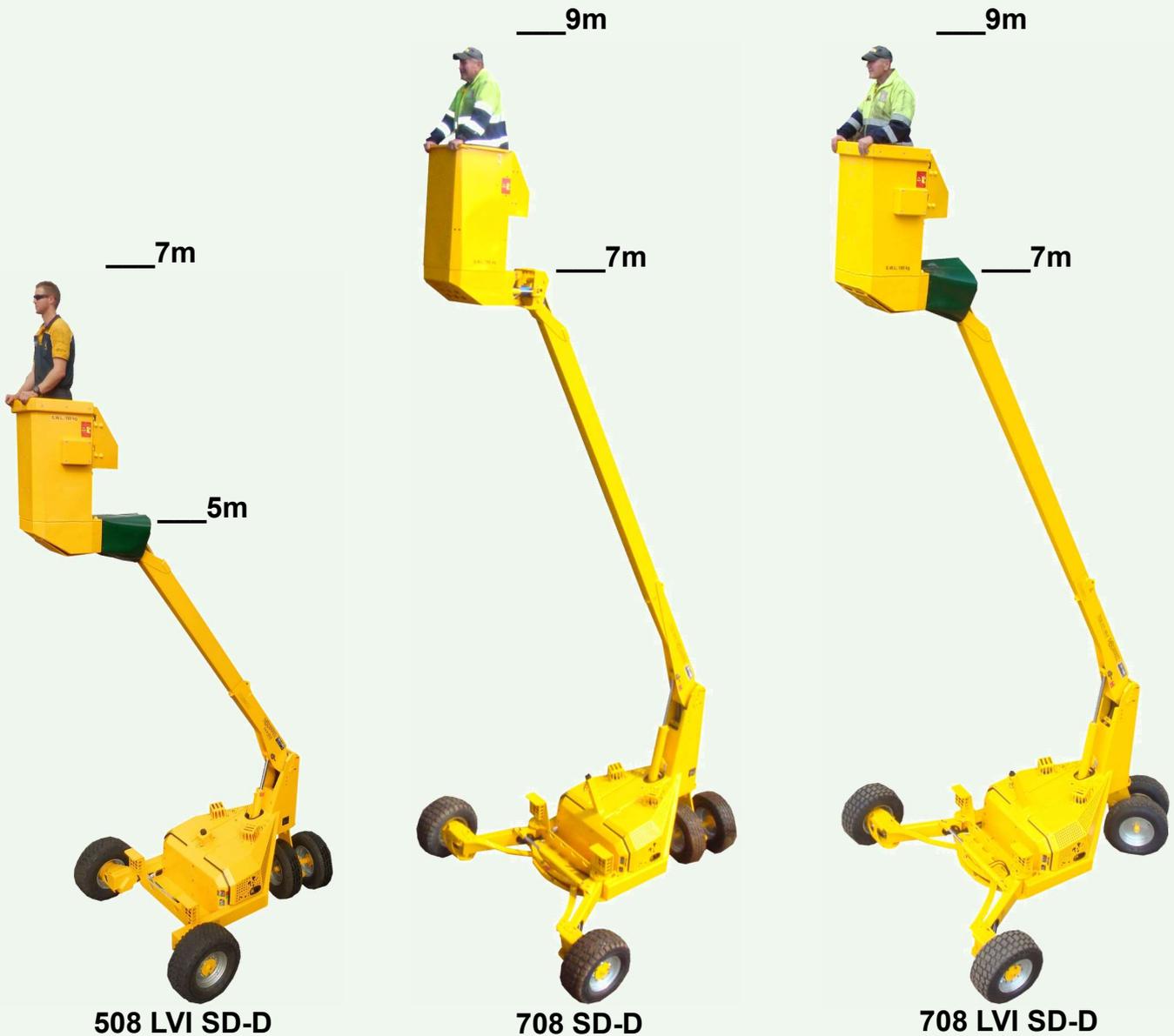


SQUIRREL

508 LVI , 708 , 708 LVI Tree Pruning Models

A self-propelled all terrain elevating platform
Raising Safety and Productivity



Tree Pruning Models

Manufacturers and designers of horticultural & viticultural equipment

Phone: 1300 761 922
E-mail: info@crendon.com.au
www.crendon.com.au



- * **SQUIRREL** Elevating platforms
- * **NetWizz** Bird netting applicator
- * **SADIE** Orchard & vineyard sweepers
- * **OliNet** harvesting aid for olives etc
- * **BIN RUNNER** Bin Trailers

SQUIRREL'S unique foot control and smooth hydraulic system increases productivity up to 30% ahead of all other machines.

Standard features on all SQUIRRELS include.

- Free Wheeling Hubs and Towing Draw-bar
- Fail Safe Hydraulic brakes incorporating Auto Hill Descent Wet Brakes
- Large Diameter Drive & Caster Wheels
- Electric Hydraulic Three Speed
- Planetary Drive 8:1 Wheel Hubs
- Best back up and Spare parts
- Large 83 lt Steel Fuel Tank
- LED Tail lights & 2 Flashing Lights
- Triple Hydraulic Pump
- Safety Throughout
- Side Swing Cage
- Electric Throttle
- Enclosed Cage

Three speed is a standard feature which operates independently from the variable engine rpm, enabling the operator to select a wide range of speeds for safe and faster operation. There is a toggle stick in the cage to change speeds, which can be done while driving.

A safety height sensor switches gear 3 off and reverts to gear 2 when the cage is raised above 1/3rd height.

Gear 1 slow speed steady work at heights.

Gear 2 steady to fast work speed.

Gear 3 travelling speed.



CAGE is enclosed on three sides, safely protecting the operator from branches. Also sited in the cage is (L-R) Electric Throttle, E-Stop, Start, Electric Hydraulic Three Speed, Horn and E-Decent . All switches are rated IP67 and sealed in a box.

Side Swing Cage

The cage rotates hydraulically 110° left through to right by using the left foot pedal. Cage swing is constant at all heights making the SQUIRREL ideal for a range of applications. This cage swing allows the operator to reach a greater area instantly without moving the base of the machine.



Low Voltage Insulation Cage & Boom on LVI models



Left Foot Pedal

Toe down raises the cage.
Heel down lowers the cage.
Twist foot left and cage swings left.
Twist foot right and cage swings right.

Right Foot Pedal

Toe down drives forward.
Heel down drives in reverse.
Twist foot right to turn right.
Twist foot left to turn left.

All controls: lift, side swing, drive left & right can be easily operated at the same time giving three dimensional movement, this dramatically increases operator productivity.

Safe In & Out of Cage

The SQUIRRELS Cage: is safe and easy to enter and exit - no bending and twisting under hand rails. It is automatically closed and latched with 2 separate latches. As the rear seat belt is attached, getting in and out is safe and fast. To un-latch it requires 2 fingers to lift two latches, then push back. The latch handles are recessed in the back inside corner. Incorporated in the cage gate is a engine kill switch, as soon as the gate is unlocked the engine stops

The Squirrel gate is fully OHS safety compliant providing the safest way to access the cage, no bending, twisting or climbing over the top of the cage as in other EWPs.

Large wide seat belt

To prevent the operator hitting the sides of the cage we have a 150mm wide belt which holds the operator above the foot controls so they can move the top of their body around without bumping the foot controls

Soft Drive

Special valving is fitted which gives a soft start and stop and allows the operator to drive quickly & safely. Foot controls are directly mounted to hydraulic valves, allowing the operator to gradually phase giving proportional movements. The new design of hydraulic system & foot valves are smoother and lighter to operate without sticking or oil leaks.

Increases productivity up to 30% ahead of all other machines.

For this we must make the Squirrel: **Very safe, Smooth riding, Simple controls, Three speeds, Fast travelling speed.**

The operator must feel safe with simple smooth controls and will keep the Squirrel moving so that the pruning is within easy reach, the same as if they were pruning on the ground, always moving as they operate. As they trust the Squirrel they will operate in gear 2 instead of gear 1 and using gear 3 for travelling. The operator can adjust the engine RPM to get their ideal speed.

The operator can maintain a higher speed only if they have a smooth ride. This is achieved by large load sharing wheels, our unique "Soft Drive" which reduces any sudden stopping and proportional hydraulic control valves so that the operator can phase the controls.



Easy Adjust Foot Stops

New foot stops are larger and can now be adjusted without tools, rotate up 70° and slide to next hole then rotate down 70°. They cannot be removed from the pedal unless a nyloc nut is undone. New foot pedals are bigger with more gap around sides to allow small pieces of debris to fall through.



Four Flashing Lights

Each 508 & 708 has four amber LED flashing lights, 2 x rotating beacons mounted on the bonnet inclosed in a heavy steel guard and two amber LED flashing strip mounted in the tail lights under a heavy steel guard. All lights are rated IP 67

Cage is built tough for hard work.

The top of the LVI cage is protected by 120mm x 45mm x 500mm solid nylon. Chain saw / hedge trimmer rack is mounted each side of the cage made from 90mm x 200mm x 250mm solid nylon material. The cage and boom are coated with thick insulation rubber "Linex" a USA made material that we have found to be more durable than fibreglass.



Cage bottom guard

Foot Controls are protected by a bottom guard, to clean just remove 2 clips and this will swing down cleaning itself. To remove fully unclip another 3 clips.

Best back up and spare parts

Crendon Machinery is a small family company priding itself on the very best back up and spare parts. The team can provide you with the best service in person or over the phone.



Large HDPE

Bushes on zinc shafts

The boom, stabiliser bar, caster wheel & lift ram all have replaceable HDPE (high density polyethylene) bushes with a 10mm flange fitted to zinc plated shaft. This gives safe long wear free pivot life.

- Caster wheel pivots are Ø75mm shaft.
- Boom & swing out wheels pivots are 50mm shaft.
- Boom lift ram pins are Ø40mm shaft.
- Stabiliser Bar & Cage Side Swing pivots are Ø30mm shaft.
- LVI pivots have an extra bush 2 x thick green fibreglass sheave for very good reliable insulation.

Grease nipples are recessed into the end of the pins and grease extrudes to the centre gallery so it is almost self greasing.

Fully Enclosed Engine Compartment

The bonnets are made from heavy steel and will not break with falling branches.

With a very heavy frame & RHS, the frame is built to last and able to work on steep slopes.

A Vanguard v-twin cylinder 23hp EFI (electronic fuel injection) petrol engine is standard. Optional extra of a Kubota 3 cylinder water cooled 23hp diesel is available. The exhaust is extended and piped low down to the rear of the Squirrel away from workers. The engine base is supported on springs to eliminate vibration making it very comfortable standing in the cage.



E - Stop and Start & E-descent switch, are accessible without lifting the bonnet.



Sealed Enclosure

A sealed enclosure protects all the electrical components. All external electrical connections are rated at IP67. 3 resettable circuit breakers are fitted to protect the wiring.



Powerful Hydraulic Three Pump System

Hydraulics have the capacity to handle steep and adverse conditions. The system is protected by a very large fine 20 micron suction filter and smaller 5 micron return filter. Both filters are fitted with glycerine pressure gauges to indicate when filters need changing.



Three hydraulic pumps are fitted - 1 pump for boom lift & side swing, 2 pumps for drive wheels. This 3 pump system keeps the pressure low. Three hydraulic oil tanks in the frame and on petrol engines 2 x exhaust fan.

All hydraulic rams are fitted with safety lock-out valves preventing any creep or movement when not operated.



Easy to service

Bonnets swing up with stainless steel gas strut to give easy access for servicing. Engine compartment has lots of space for easy servicing. For security, the bonnets are lockable

83 lt fuel tank

The SQUIRREL engine is fitted with a mechanical fuel pump, fuel filter and has a 83litre steel fuel tank to allow for up to 4-5 days use.



With large drive & castor wheel, easier climbing kerbs smoother ride = increasing productivity

Drive wheels Ø790mm x 340mm wide 10 ply (31x13.5x15) and Castor wheels Ø790mm x 250mm (31x10.5x15) (above left in each picture) are standard.



The larger wider wheels make driving over street kerbs large branches and soft ground a lot easier and smoother, enabling the operator to continue driving and pruning efficiently. On the right side of each picture is what most other makes of EWP's use.

Tractor grip drive wheels 31x15.5x15 are available if required



High performance Hydraulic Motor & Planetary wheel hub

Picture right has motor cover removed

To get the best high performance drive we need high performance hydraulic motors rotating at a high RPM, by using a 8:1 planetary reduction gear box. We keep the hydraulic motor operating at its most efficient range, giving a high torque and long life. Our own design of very heavy duty 8:1 planetary reduction gearbox with an integrated powerful industrial hydraulic motor and incorporated fail safe multi-disc wet brakes eliminate wheel creep, and auto brakes smoothly when driving down a slope. No jerky movements and brake springs can be changed to alter stopping speeds.

The high torque "BMSY" hydraulic motors are fitted with case drains to give long life.

Hubs are standard with quick disengage freewheeling. This is the most powerful efficient drive giving maximum torque to the drive wheels up to twice of other makes of EWP's.



Easy Servicing

A rear cover plate un bolts from back post for easy servicing. Non conductive double braid hoses are fitted to all hoses from the cage to engine bay, no joins in the boom, this hose is Ultra high pressure rated to 10,000 PSI working pressure. The Squirrel has a working pressure of 2,000 PSI with a max pressure setting of 3,100 PSI system. Boom is now 120mm was 100mm wide allowing more room for hydraulic hoses.

Pictured (left) cover on back post, pictured (right) boom to back post



Twin Caster Wheels

Two independent castor wheels with an additional horizontal pivot provides a very smooth ride over street kerbs. As one wheel rolls up the kerb the other wheel stays at the original level. Effectively the height of the kerb is halved. This allows the operator to comfortably

work safely and quickly. Most other makes of EWP's castor wheel assembly is rigid, so the Squirrel is much more manoeuvrable. The two wheels also don't damage the lawn surface.



Easy Towing

Towing for short distances of 2-20 km at slow speed: fit the heavy duty draw-bar; push the free-wheel pin in the planetary hub in, then rotate 90°.

SQUIRREL 508 LVI SD-D

7m Reach 5m Platform height

This new 508 LVI SD-D “Soft Drive Deluxe” Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 50 years.

This model is ideal for street trees, pruning near power lines. Standard features include: Low voltage insulation, side swing cage, hydraulic electric three speed, large drive & caster wheels with planetary drive hubs with fail-safe brakes, 4 x LED flashing lights, two x solid nylon chain saw / hedge trimmer racks, allowing the operator to work fast & safely under and near power lines.

- Genuine foot controls SD (Soft Drive)
- Fully enclosed spacious engine compartment
- Powerful three hydraulic pump system
- Self lubricating replaceable bushes
- Planetary 8:1 wheel drive hubs
- Large diameter wheels 790mm Ø
- 180KG SWL with 10° side ways angle & 12.5° forwards angle at full height
- Best back up and spare parts
- Electric hydraulic three speed
 - Towing & free wheeling standard
 - Two large caster wheels 790 Ø x 260mm wide
 - Large self closing cage gate
 - Safety throughout
 - Side swing cage
 - Electric throttle
 - Compact length
 - 83 lt fuel tank



SQUIRREL 708 SD-D & 708 LVI SD-D

9m Reach 7 Platform height, Available in Std & Low Voltage Insulation

- Genuine foot controls SD (Soft Drive)
- Fully enclosed spacious engine compartment
- Self lubricating replaceable bushes
- Planetary wheel drive hubs
- Powerful three hydraulic pump system
- Wide drive tyres standard 790mm Ø x 340mm wide
- 180KG SWL with 10° side ways angle & 12.5° forwards angle at full height
- Electric hydraulic three speed
- Towing & free wheeling standard
- 23hp V-twin Vanguard petrol engine
- Diesel Kubota 3 cyl engine option
- Two caster flotation wheels
- Large self closing cage gate
- Safety throughout
- Side swing cage
- Electric throttle
- Compact length
- Enclosed cage
- 83 lt fuel tank
- True all-terrain

This new 708 SD-D “Soft Drive Deluxe” Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 50 years.

This model is ideal for low to high tree pruning. Standard features include side swing cage, hydraulic electric three speed, large drive wheels with planetary drive hubs with fail-safe brakes, allowing the operator to work at maximum capacity of 180KG SWL on steep slopes.



Hydraulic Swing out drive wheels width 1.75m - 3m

The 708 SQUIRREL have a quick adjustable drive wheel track. The wheels swing out to 3m outside for work and can easily swing in for transport. Safety switches prevent the boom raising above 4.5m if the wheels are not at 3m. The wide wheel base gives a very safe and smooth ride over rough terrain.

Adjusting the wheel track is very quick and foolproof: using a switch inside of the cage, just drive the Squirrel with the switch on and boom pedal operating the wheel width ram in or out. The 1.75m narrow setting enables easy transport on car trailers.

Short in Length

The 708 model are short in length about 1m shorter than other EWP's in the market for the same height this makes it a lot more manoeuvrable in around trees

The 708 LVI SD-D Low Voltage Insulated model pictured above

The Standard 708 SD-D (non insulated model) pictured above



Kubota diesel engine 23hp 3 cyl water cooled

The Kubota D902 3 cylinder water cooled diesel engine provides a quiet, very reliable, efficient alternative to petrol for heavy duty applications, has low oil pressure and high water temperature auto shut down, large diesel filter with self bleeding pump.



Hydraulic tool outlets

Hydraulic tool outlets in cage with on/off & safety valve 25-45 l/pm 1,700 psi.



508 Squirrel Trailer for 508, 505 and smaller Squirrels & 708 Squirrel Trailer for 708, 655 and smaller Squirrels

These beaver tail trailer is designed for the very safe loading, unloading and transport of Squirrels and other wheeled machinery along with traffic management signs. Both Trailers, rated ATM 3.5 tonne max load 2.3 tonne, (can be up graded to ATM 4.4 tonne max load 3.2 tonne). Ramps are powered by gas struts for easy positioning. The Trailer an ramps have sides on for very safe loading. Floor is 8mm expanded mesh all hot dip galvanised lights are all LED. Wheels 15" Landcruiser, hubs, electric brakes & axle all rated to 4.5 tonne, Trailer comes with adjustable height draw bar, spare wheel, tool box, 2 x 20 lt fuel can holders, cage platform, steps & hand rails for safe Squirrel cage access.



Beaver Tail / Flat top Squirrel Trailer for 508 & 708

This beaver tail / flat top trailer is designed for unloading and transport of Squirrels and other wheeled machinery and general purpose trailer flat top when the ramps are folded over to give a flat top. This Trailer comes with 3 drawbar options, short for 508, medium for 708 and long for other Squirrels, rated ATM 3.5 tonne max load 2.3 tonne, (can be up graded to ATM 4.4 tonne max load 3.2 tonne) . Ramps are powered by gas struts and springs for easy positioning. Floor is 8mm expanded mesh all hot dip galvanised lights are all LED. Wheels 15" Landcruiser, hubs, electric brakes & axle all rated to 4.5 tonne, Trailer comes with spare wheel, tool box, cage platform, steps & hand rails for safe Squirrel cage access.

SQUIRREL 508 LVI, 708 LVI & 708 Specifications

Crendon Machinery 508 & 708 Squirrel Specifications, self-propelled all terrain elevating work platform 6-2024

Squirrel Models	508 LVI SD-D	708 LVI SD-D	708 SD-D
Model type	Low Voltage Insulation, Soft Drive Deluxe	Low Voltage Insulation, Soft Drive Deluxe	Soft Drive Deluxe
Main Application	Street Tree pruning around power lines	Street Tree tall trees pruning around power lines	Street Tree tall trees pruning
Max. Cage platform height	5m	7m	
SWL	180kg		
Cage Side Swing	Standard 110°, 55° right - 55° left		
Fail-safe brakes, hill descent brakes, freel wheeling, tow bar with 50mm ball hitch	Standard		
Total Length when boom fully lowered (approx)	4.84m	6.25m	
Cage overhang when Down / Full Height (approx)	2.06m / 0.86m	3.26m / 0.58m	
Width outside tyres wheels in / wheels out (approx)	2.37m	3m (when above 4m height), 1.7m, 1.84m, 2m & 2.4m (only below 4m height)	
Rear machine height (approx)	1.97m	2.35m	
Ground clearance (approx)	0.37m	0.36m	
Tray size under bonnet in front of engine bay	0.39m x 1.3m (bottom shelf) 0.39 x 0.7m (top shelf)	0.29m x 1.3m (bottom shelf) 0.29 x 0.7m (top shelf)	
Total Weight (approx).	2.13 tonne	2.34 tonne	2.24 tonne
Maximum slope sideways	10° at full height & full side swing & caster wheel all in least favourable position		
Maximum slope forwards	12.5° at full height		
Low Voltage Insulation rated	1,000V AC dry		none
Hydraulic 3 speed Ground Speeds km/hr Three Speed Gear 1, 2, 3 (approx)	gear 1; 0.5-2, gear 2; 1.5-3.5, gear 3; 1.7-5, km/hr	gear 1; 0.5-1.8, gear 2; 1-3, gear 3; 1-4, km/hr	
Wheel torque (Max)	4,160 Nm	4800 Nm	
Standard Drive wheel tyre	2 ea 31x13.5x15, 12 ply, (790 Ø x 340 wide) Diamond block road tread		
Caster wheel tyre	2 ea 31x10.5 x15, 6 ply (790 Ø x 260 wide)		
Engine	23HP EFI, V twin, OHV, Vanguard, Petrol		
Chain saw holders & trays	2 x Chain saw / Hedge trimmer holder from solid HDPE Nylon, Tray in rear cage gate		
Squirrel Models	508 LVI SD-D	708 LVI SD-D	708 SD-D
Optional extra			
Diesel Engine Option extra	Optional; 23hp Kubota D902 3 cyl water cooled		
Hydraulic Outlets in Cage	Optional extra		

Available through your local dealer

Warranty 12 month from date of delivery.

Disclaimer : The pictures and information in this brochure are a guide only. Specifications are subject to change without notice and without liability expressed or implied.