

SQUIRREL

505 SD, 655 SD & 805 SD

005 Models

A self-propelled all terrain elevating platform

Raising Safety and Productivity



Manufacturers and designers of horticultural & viticultural equipment

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- * **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
- Electric Hydraulic Three Speed
- Planetary Drive 8:1 Wheel Hubs
- Best back up and Spare parts
- Large 55 lt Steel Fuel Tank
- 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, reverting 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, bin forks and electric hydraulic three speed. All switches are rated IP67 and sealed in an aluminium 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.



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, dramatically increasing operator productivity.

Safe In & Out of Cage

The SQUIRREL's 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.

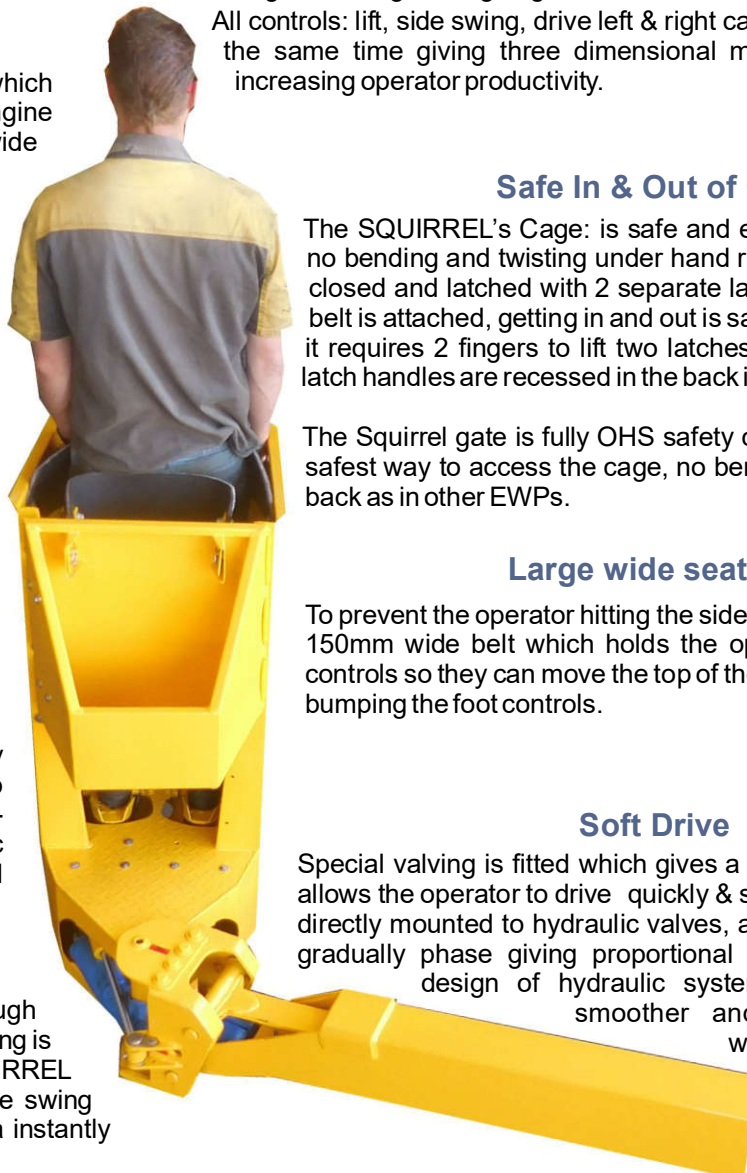
The Squirrel gate is fully OHS safety compliant providing the safest way to access the cage, no bending and twisting your back as in other EWPs.

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, Large picking bag.**

The operator must feel safe with simple smooth controls and will keep the Squirrel moving so that the job is within easy reach, 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.



With large drive wheels, more grip, less bogging, smoother ride = increasing productivity

Drive wheels Ø620mm x 300mm standard and Ø790mm x 380mm wide 8 ply (optional extra above right picture). The larger wider wheels make driving over wheel ruts and soft ground a lot easier and smoother, enabling the operator to continue driving and working efficiently. On the left side of each picture is what most other makes of EWPs use.

Large caster wheel

Caster wheels Ø620mm x 300mm standard. The larger wider wheels make driving over wheel ruts and soft ground a lot easier and smoother, enabling the operator to continue driving and working efficiently. On the left side of this picture is what most other makes of EWPs use.



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 it's 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.



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



Cage bottom guard

Foot controls are protected by a bottom guard; to clean just remove 2 clips and this will swing down cleaning itself (standard on all cages).



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 fruit to fall through.

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, bogie rocker & 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 pivots & bottom caster wheel are Ø50mm shaft. Boom lift ram pins, stabiliser bar & cage side swing pivots are Ø30mm shaft.

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 fallen or overhanging branches. For security, the bonnets are lockable and swing up with a gas strut to give easy access for servicing. Very heavy RHS frame is 9mm thick, bonnet outer frame is 10mm & 6mm

A Vanguard v-twin cylinder 16hp petrol engine is standard. Optional extra of a 23 HP EFI Vanguard v-twin cylinder or 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. Engine auto stops when oil pressure is low.

For road side pruning we recommend 23 HP EFI Vanguard v-twin cylinder engine

E-Stop, Start switch and reset circuit breaker are accessible without lifting the bonnet.

A sealed enclosure protects all the electrical components.



Powerful Three Hydraulic Pump System & Soft Drive

Hydraulics have the capacity to handle steep and adverse conditions. The system is protected by a very large fine 10 micron suction filter.

Three hydraulic pumps are fitted, 1 pump for boom lift & side swing, 2 pumps for drive wheels. This 3 pump system keep the pressures low. The 505 uses 3 oil tanks to keeps the oil cool. Both 655 & 805 have a large rear oil tank.

Soft Drive: Special valving is fitted to give a soft start and stop, this allows the operator to drive safely.

The engine base is supported on springs to eliminate vibration.

There are 3 trays inside the engine bay to store tools, wet weather clothing, draw-bar, etc.

There is 0.35m of ground clearance under the frame which is ideal for driving over prunings or deep drains.

Large Caster Wheels

Caster wheel is a large flotation tyre single or twin, providing excellent flotation and smooth ride in adverse conditions. In boggy conditions the caster wheel is more important than the drive wheels as its always the caster wheel that is locked or bogged first. Two independent caster wheels with an additional horizontal pivot provide a very smooth ride over uneven terrain or street kerbs. This allows the operator to comfortably work safely and quickly. These wheels greatly reduce the possibility of bogging because of their independent rolling action. Std caster wheel is 26 x 1200 x 12 12 ply, if it is for road side pruning we fit 215 x 14" 8 ply as pictured on right.



55 lt fuel tank

The SQUIRREL engine is fitted with a mechanical fuel pump, fuel filter and has a 55 litre steel fuel tank to allow for up to 2-3 days use.

SQUIRREL 50 5 SD

7m Reach 5m Platform height

This new 505 SD Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 50 years.

This model is primarily designed for street tree pruning contractors in urban areas because of its compact size and very heavy robust construction.



- Genuine foot controls SD (Soft Drive)
- Fully enclosed spacious engine compartment
- Self lubricating replaceable bushes
- Powerful three hydraulic pump system
- Planetary wheel drive hubs
- Best back up and spare parts
- Electric hydraulic three speed
- Towing & free wheeling standard
- Diesel Kubota 3 cyl engine option
- 23hp EFI 2 cyl engine option
- Two caster flotation wheels
- Large self closing cage gate
- Hand control options
- Safety throughout
- Side swing cage
- Electric throttle
- Enclosed cage
- Compact length

Low voltage insulation

(optional Extra) Pictured left & below.

Two separate connection points have non-conductive HDPE bushes. Low voltage safety is increased by having these two LV joints. Includes rubber coated cage, boom and stabiliser bar; insulated hydraulic hoses and 4 cage pivots. The Squirrel cage still has safe, fast rear access through a gate - no climbing over the top of the cage. Tested and certified to AS1418.10. Recommended for street tree pruning near power lines.



Tail-lights & Amber flashing light

(optional Extra) Pictured above.

Tail-lights on both sides are fully protected from pruning and wired to a 7 pin round plug. Amber flashing light is fully protected from falling pruning. This option is recommended if working on the roadside. Some application might require two or three flashing lights.

One man cage, Joy stick drive & foot control

(optional Extra)

Single man cage with hand joystick drive controls. The cage has a 100mm longer floor so that the operator has room to move without bumping the pedals. The cage still rotates 60° left and 60° right.



23 hp EFI Engine

(optional Extra)

23hp, EFI, V twin Vanguard petrol engine is recommended for street tree work. This engine is fuel efficient with more power for faster operation.

Compact length

The Squirrel 505 SD cage, bonnets and frame back have large rounded corners so overhanging branches easily deflect.

The 505 is short in design - about 1m shorter than other machines in the market so this makes it a lot more manoeuvrable around street trees.



Caster wheels

Two independent caster wheels with an additional horizontal pivot provide a very smooth ride over street kerbs. As one wheel mounts a kerb the other stays at the original level.

SQUIRREL 65 5 SD

8.5m Reach 6.5m Platform height

This new 655 SD Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 50 years.

The 655 SQUIRREL has a 150kg safe working load making it the ideal machine for Industrial hire fleets, shed construction applications and high pruning because of its robust construction and many features.

- Genuine foot controls SD (Soft Drive)
- Fully enclosed spacious engine compartment
- Self lubricating replaceable bushes
- Powerful three hydraulic pump system
- Swing out drive wheels width 1.9-3m
- Planetary wheel drive hubs
- Best back up and spare parts
- Electric hydraulic three speed
- Towing & free wheeling standard
- Diesel Kubota 3 cyl engine option
- Two caster flotation wheels
- Hydraulic wheel shift option
- Hand control option
- Safety throughout
- Side swing cage
- Electric throttle
- Enclosed cage
- Compact length

Compact length

The high king pin post allows the boom length to be 2m shorter and results in greater mobility in tight areas.



Towing & free wheeling is standard

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



Swing out drive wheels width 1.9m - 3m

The 65 5 & 80 5 SQUIRREL have the same 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: use the jack provided to jack up one side at a time, drive wheel assembly slides into a slot and re-pinned in another width setting. The 1.9m narrow setting enables easy transport on car trailers.



SQUIRREL 80 5 SD

10m Reach 8m Platform height

This new 805 SD Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 50 years.

The 805 SQUIRREL has a 200kg safe working load making it the ideal machine for Industrial hire fleets, shed construction applications and high pruning because of its robust construction and many features.

Two Man Cage (optional extra)

A Two Man Cage with hand controls is also available on 805 model SQUIRREL (shown above & left). With joystick drive & hand controls, this is ideal for hire fleets and industrial applications. The cage hydraulically rotates 45° left and 45° right. Controls are directly mounted to the valves allowing the operator to phase all movements. Floor has slots for safe drainage and vision below. Tool trays are incorporated into the top hand rail for safe easy work. Safe access is through the rear gate which opens inwards, and sprung closed with two separate latches.



Swing out Drive wheels width 1.9m - 3m

The 80 5 & 655 SQUIRREL have the same 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: use the jack provided to jack up one side at a time, drive wheel assembly slides into a slot and re-pinned in another width setting. The 1.9m narrow setting enables easy transport on car trailers.

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- Electric hydraulic three speed
- Towing & free wheeling standard
- Diesel Kubota 3 cyl engine option
- Two caster flotation wheels
- Hydraulic wheel shift option
- Two man cage option
- Hand control option
- Safety throughout
 - Side swing cage
 - Electric throttle
 - Enclosed cage
 - Compact length

Compact length

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Towing & free wheeling is standard

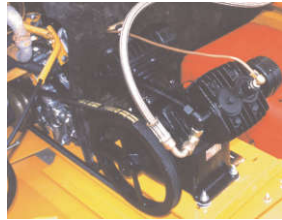
Towing for short distances of 2-20 km at slow speed: fit the heavy duty draw-bar; push the free-wheel pin in the planetary hub in, then rotate 90°.





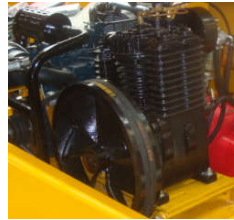
Air Compressor - 13 cfm

If using air secateurs for tree pruning, a 13cfm heavy duty cast iron compressor with head unloading valves is recommended. This comes with a 5 lt capacity air tank.



Air Compressor - 22 cfm

If using air secateurs and occasionally an air chain saw for tree pruning, a 22cfm heavy duty cast iron compressor with head unloading valves is recommended. This comes with a 5 lt capacity air tank.



Air Compressor - 30 cfm

If using an air chain saw for continuous or street tree pruning, a 30 cfm two stage heavy duty cast iron compressor with head unloading valves is recommended. With this option the engine is upgraded from a 16hp to 23hp and is fitted with a large capacity air tank and lubricator.



Air Chain saw & bar/dip rack

Air operated chain saws are lightweight and are an efficient tool for cutting branches up to 100mm in diameter. They come in pistol grip or with telescopic extensions. It is recommended that a bar/dip rack is used in conjunction with a saw. The chain saw bar is immersed in oil which ensures effective lubrication of the chain. Bar dip/racks are available in standard or low voltage coated for insulated applications.



Picking Bag - Standard

The Standard picking bag is fully padded with multiple filling stages and a drawstring to eliminate bruising - only requiring four bags to fill one bin.



Picking Bag - Deluxe

The Deluxe picking bag is fully padded with four filling stages, and offers added protection from limbs by a steel cover which eliminates all bruising - requiring 5 bags to fill one bin.



Bird netting installing trays

Three trays bolted to the cage left for plastic clips, front all tools, right long wire splices.



Hydraulics tool outlets

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



One man cage, Joy stick drive & foot control

Single man cage with hand joystick drive controls. The cage has a 100mm longer floor so that the operator has room to move without bumping the pedals. This is ideal for hire fleets and industrial applications. The cage still rotates 60° left and 60° right.



Engine chain saw rack

Wood and rubber backing chain saw holder.



Tail-lights

Tail-lights on both sides are fully protected from prunings and wired to a 7 pin round plug. They are recommended if working on the roadside or towing on roads.



Two man cage Joy stick hand control

Two man cage with joystick drive & hand controls. This is ideal for hire fleets and industrial applications. The cage hydraulically rotates 45° left and 45° right. Controls are directly mounted, allowing the operator to phase all movements.



15" drive wheels

15" pictured on the left 12" on the right). 31x15.5x15 8 ply drive wheels on a hot dip galvanised rim provide maximum traction and stability. This option is recommended when working in very soft ground conditions.



Amber flashing light

Amber flashing light is fully protected from falling prunings. This option is recommended if working on the roadside or industrial sites. Some applications may require two flashing lights.



Low voltage insulation

Two separate connection points have non-conductive HDPE bushes increases low voltage safety by having these two LV joints. Includes rubber coated cage, boom and stabilizer bar; insulated hydraulic hoses and 4 cage pivots. The Squirrel cage still has safe, fast rear access through a gate - no climbing over the top of the cage. Tested and certified to AS1418.10. Recommended for street tree pruning near power lines.



Hydraulic wheel shift

The drive wheels are hydraulically extended and retracted for transport. Wheels are pushed out and held under pressure as the Squirrel is driven along. By switching a hydraulic valve, wheels are retracted in the same manner. This function is fast, safe and foolproof. This option is available on 65 5 & 80 5 Squirrels only.



12" Bogie drive wheels

4 x 26x1200x12" 8 ply bogie drive wheels provide maximum traction and stability. This option is an upgrade from single 12" or 15" drive wheels and recommended when working in very soft ground conditions.



Kubota diesel engine 23hp

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

23hp EFI engine Vanguard

23hp EFI 2 cylinder Vanguard engine up-grade. Provides an efficient alternative to 16hp Vanguard. Has electronic fuel injection, high fuel efficient, auto choke and oil cooler. 678 BSD-D & 818 BSD-D already includes this engine.



Specifications

505 SD, 655 SD & 805 SD Models

	Squirrel 505 SD	Squirrel 655 SD	Squirrel 805 SD
Cage platform height	5m	6.5m	8.0m
SWL	150kg		200kg
Total Length when boom fully lowered	4.4m	5.28m	7.4m
Cage overhang when Down / Full Height	2.6m / 0.75m	2.03m / 0.42m	3.15m / 0.52m
Width outside tyres wheel in / wheel out	2.35m		1.9, 2.4, 3m
Rear machine height	1.9	2.7m	3m
Ground clearance	0.35m	0.35m	0.35m
Total Weight approx.	1.7	1.8	2.1
Maximum slope sideways	7.5° at full height		
Maximum slope forwards	15° at full height		
Ground Speeds kmph Gear 1, 2, 3	0-3, 0-4, 1-7 kmph	0-2, 0-3, 1-6 kmph	0-1.4, 0-2, 1-4 kmph
Wheel torque (Max)	3,000 N-m	3,680 N-m	4,480 N-m
Drive wheel tyre	26 x 1200 x 12 8 ply tractor grip (Standard) 26 x 1200 x 12 4 ply Soft trac (for lawn & roads use)		
Caster wheel tyre	Two x 26 x 1200 x 12 12 ply implement rib (Standard) 215 x 14" 8 ply trailer tyre (for lawn & roads use)		
Engine	16 HP V Twin cylinder Vanguard		
Optional extra			
15" Drive wheel	Available in Tractor grip only 31 x 15.5 x 15 8 ply		
Bogie Drive wheels	Optional extra		
23 hp, EFI Engine Option extra	Recommended for street tree pruning		
Diesel Engine Option extra	23hp Kubota D902 3 cyl water cooled		
Air Compressor cfm	13 CFM / 22 CFM / 30 CFM		
One Man Cage Hand & Foot Control	Optional extra		
Two Man Cage Hand Controls	Not Available		Optional extra
Hydraulic Wheel Retraction	Optional extra		
Hyd 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.