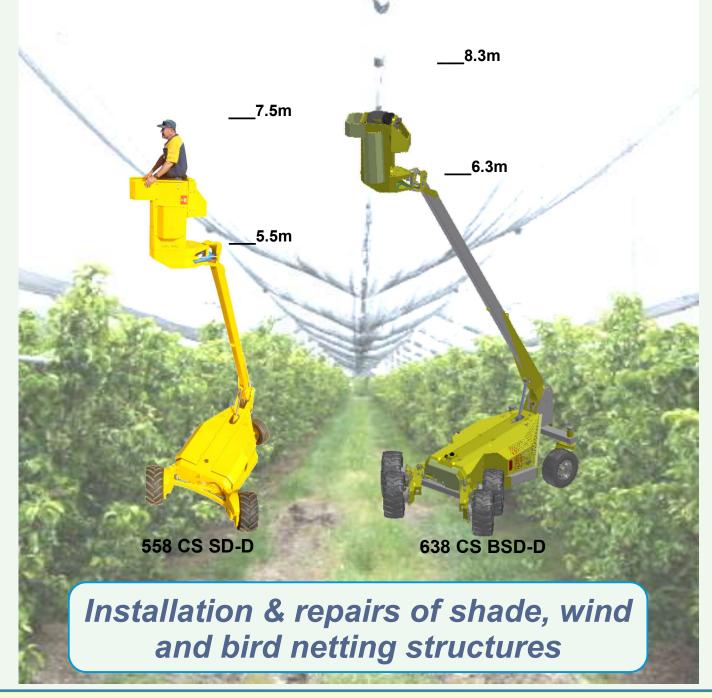


## 558 & 638 Crab Steer Soft Drive Deluxe

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



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

## SELIRREL All models

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

Standard features on this SQUIRREL include.

- Free Wheeling Hubs and Towing Draw-bar
- Fail Safe Hydraulic brakes incorporating Auto Hill Descent Wet Brakes
- Large Wide Drive & Caster Wheels
- Drive wheels rotate 30° each side
- Electric Hydraulic Three Speed
- Planetary Drive 8:1 Wheel Hubs
- Best back up and Spare parts
- Large 100 It 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 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, start, E-Stop, 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, 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 spring 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. There is a switch on the cage gate that stops the engine if the gate is open

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

design of hydraulic system & foot valves are smoother and lighter to operate without sticking or oil leaks.

## SELIRREL 558 Crab Steer

# 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**.

The operator must feel safe with simple smooth controls and will keep the Squirrel moving so that the fruit is within easy reach, the same as if they were picking 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 to the bin. 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 & caster wheel, more grip, less bogging, smoother ride = increased productivity

Drive wheels Ø790mm x 380mm wide 8 ply and Caster wheels Ø620mm x 300mm (above right in each picture) are standard. The larger wider wheels make driving over large branches, wheel ruts and soft ground a lot easier and smoother, enabling the operator to continue driving and picking efficiently. On the left side of each 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.

The high torque hydraulic motors are fitted with special high pressure shaft seals and 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 EWPs.



### Cage bottom guard

Foot Controls are protected by a bottom guard. To clean just remove 2 clips and this will swing down cleaning itself. This is 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 and bogie rocker pivots are Ø75mm shaft. Boom pivots & crab drive are Ø50mm shaft. Boom lift ram pins are Ø40mm shaft. 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.

## SELIRREL 558 Crab Steer

### **Fully Enclosed Engine Compartment**

The bonnets are made from heavy steel and will not break with fallen or overhanging branches.

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

A V-twin cylinder 23hp EFI petrol engine is standard on these Squirrels. 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 switch, Boom Emergency decent are accessible without lifting the bonnet.

A sealed enclosure protects all the electrical components. All external electrical connections are rated at IP67.



### **Powerful Three Hydraulic Pump System**

Hydraulics have the capacity to handle steep and adverse conditions. The system is protected by a very large 20 micron suction filter and smaller 5 micron return filter. 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 keep the oil cool.

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

### Low back & Compact length

The 558 CS Squirrel has a low back and low profile bonnet all with large rounded edges to deflect branches & stop netting catching

The 558 models are short in design about 0.5m - 1m shorter than other EWPs in the market and makes it a lot more manoeuvrable in the rows.



Both filters are fitted with glycerine pressure gauges to indicate when filters need changing.



### Easy to service

Bonnets swing up aided by a 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

### 100 It fuel tank

The SQUIRREL engine is fitted with a mechanical fuel pump, fuel filter and has a 100 litre steel fuel tank to allow for up to 5 days use.

### Large storage area

There is a large storage area in front of the engine bay 1.2m x 0.6m for mango wash tank or storage box for wet weather gear, safety harness etc.

### SELIRREL 558 Crab Steer Soft Drive Deluxe

7.5m Reach 5.5m Platform height

This new 558 CS SD-D " Crab Steer Soft Drive Deluxe" Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 55 years.

This model is ideal for installation & repairs of shade, wind and bird netting structures. Standard features include drive wheels are hydraulically steered by up to 30° each way, 60° in total, 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 slopes.

### Four tool trays

Comes with 4 trays including cate gate tray. Three trays bolted to the cage (left for plastic clips, front for all tools, right for long wire splices).

### **Steering Drive Wheels**

These drive wheels are hydraulically steered by up to 35° each way, 70° in total. This allows driving straight down rows, the cage over-hanging one side, perfect for working on a wall or wind breaks



### Side Swing Cage

This cage swing allows the operator to reach a greater area instantly without moving the base of the machine.

### Wide Twin Caster Wheels

Two independent caster wheels with an additional horizontal pivot provides a very smooth ride over uneven terrain or ruts. As one wheel falls into a rut the other stays at the original level. Effectively the depth of the rut is halved. This allows the operator to comfortably work safely and quickly. Most other makes of EWP's caster wheel assembly is rigid, so the Squirrel is much more manoeuvrable in mounded or terraced rows.

### Wide drive tyres

The 558 comes standard with 790mm Ø, 390mm wide wheels which give good traction and a smooth ride.

- 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
- Wide drive tyres standard 790mm Ø x 380mm wide
  - 180KG SWL with 10°-12° side ways angle & 12° forwards angle at full height
    - Best back up and spare parts
    - Electric hydraulic three speed
      - Steering drive Wheels 35° each way, total 70°
        - Towing & free wheeling standard
          - Two caster flotation wheels 620 Ø x 300mm wide
            - Large self closing cage
              gate
              - Safety throughout
                - Side swing cage 55° each way, total 110°
                - Electric throttle
                - Enclosed cage with 4 tool trays
                  - Compact length
                    - True all-terrain
                    - 100 It fuel tank

### Low back and Compact length

The Squirrel 558 has a low back and low profile bonnets. Cage, bonnets and frame back have large rounded corners so overhanging branches easily deflect.

The 558 is short in design (about .5m shorter than other machines the same height in the market) so this makes it more manoeuvrable in the rows.

### SELECTION 638 Crab Steer Bogie Soft Drive Deluxe

8.3m Reach

6.3m Platform height

### This new 638 CS BSD-D " Crab Steer Bogie Soft Drive Deluxe" Squirrel has been developed to incorporate all the latest features and experience gained from manufacturing over the past 55 years.

This model is ideal for installation & repairs of tall shade, wind and bird netting structures. Standard features include drive wheels are hydraulically steered by up to 40° each way, 80° in total, 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 slopes.



### Two caster flotation wheels

Two wide independent caster flotation wheels on a pivoting cross axle assists with a smooth ride over difficult terrain. The cross axle rocks  $15^{\circ}$  each way. Most other makes of EWP's cross axle is only rocked by less than  $3^{\circ}-5^{\circ}$  or no pivot at all, so the Squirrel is much more manoeuvrable in mounded or terraced rows.



### Wide tyres standard (790mm Ø x 350mm wide)

The 678 BSD-D comes standard with bogie drive 15" wheels on walking beam, planetary 8:1 gearbox with hydraulic motor for each wheel, fail-safe brakes. The 15" wheels give the

Squirrel superior traction and smooth ride over difficult terrain without bogging. Rims are hot dip galvanised for long life.

• Genuine foot controls SD (Soft Drive)

 Steering bogie drive Wheels 40° each way, total 80°

• Two caster flotation wheels 620 Ø x 300mm wide on a cross rocker assembly

- Fully enclosed spacious engine compartment with Separate tool storage areas
  - 180KG SWL with 12°-15° side ways angle & 15° forwards angle at full height
    - Wide bogie drive tyres standard 790mm Ø x 380mm wide offset 100mm for more traction
      - Powerful three hydraulic pump system
        - Self lubricating replaceable bushes
          - Planetary 8:1 wheel drive hubs
            - Best back up and spare parts
              - Electric hydraulic three speed
                - Towing & free wheeling standard
                  - Enclosed cage with 4 tool trays
                    - Large self closing cage gate
                      - Safety throughout
                        - Side swing cage
                          - Electric throttle
                            - Compact length
                              - True all-terrain
                                - 100 It fuel tank

Low back and Compact length The Squirrel 638 CS has a low back and low profile bonnets. Cage, bonnets and frame back have large rounded corners so overhanging branches easily deflect.

The 638 is shorter in design (about 0.7m shorter than other machines the same height in the market). Page 6 of 8

## SEURREL OPTIONAL EXTRAS



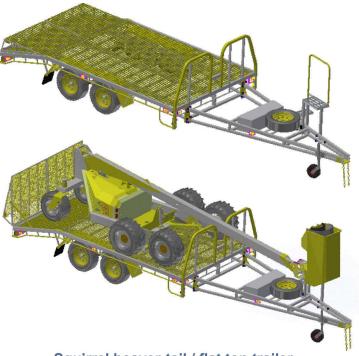
### **Picking Bag - Standard**

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 double lined with padded inside, four filling stages, and offers added protection from limbs by a steel cover which eliminates all bruising requiring 5-6 bags to fill one bin.





Hydraulic tool outlets

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



#### 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.

#### Squirrel beaver-tail / flat top trailer

A range of trailers are available. For the orchards we have a beaver-tail / flat top model. When transporting Squirrels or any other wheeled machine it is a beaver-tail with swing down ramps. These ramps are pinned vertically, the ramps can also swing right over to make a flat top trailer, with a tray size of 2.45m x 4.45m. Ramps are powered by gas struts & springs for easy positioning. Floor is 8mm expanded mesh all hot dip galvinised. Lights are all LED. Wheels 15" Landcruiser, hubs, electric brakes & axle all rated to 4.5 tonne, Trailer rated for 3.5 tonne. Different drawbars bolt on to suit your requirements. Comes with spare wheel, tool box, cage platform, steps & hand rails for safe Squirrel cage access. Head board can be unbolted.

Separate Squirrel trailer brochure with information and detailed specifications is available.



#### 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.



Chain saw / hedge trimmer rack

Solid nylon with slots to take chain saw and hedge trimmers.



### 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 auto shut down large diesel filter with hand pump.



### 558 CS SD-D & 638 CS BSD-D Specifications

| 558 & 638 Crab Steer Squirrel Specifications, self-propelled all terrain elevating work platform 7-2022 |   |  |
|---|---|--|
| Squirrel Model  | 558 Crab Steer SD-D   | 638 Crab Steer Bogie SD-D  |
| Model type  | Soft Drive Deluxe   | Bogie Soft Drive Deluxe  |
| Main Application  | Installation & repairs of shade, wind & bird netting structures                     | Installation & repairs of shade, wind & bird netting structures                  |
| Max. Cage platform height   | 5.5m  | 6.3m   |
| SWL   | 180   | 180  |
| Cage Side Swing   | Standard 110°, 55° right - 55° left   | Standard 110°, 55° right - 55° left  |
| Drive wheels crab steer   | Standard 70°, 35° right - 35° left  | Standard 80°, 40° right - 40° left   |
| Fail-safe brakes, hill descent brakes, freel wheeling,<br>tow bar with 50mm ball hitch                  | Standard  | Standard   |
| Total Length when boom fully lowered  | 5.56m   | 6.7m   |
| Cage overhang when Down / Full Height   | 2.58m / 0.52m   | 2.94m / 0.52m  |
| Width outside tyres wheels in / wheels out  | 2.3m / (2.65m spin wheels around)   | 2.45m / (2.8m spin wheels around)  |
| Rear machine height   | 1.55m   |  |
| Ground clearance  | 0.3m  | 0.3m   |
| Tray size in front of engine bay  | 1.21m x 0.61m   | 1.21m x0.45m   |
| Total Weight approx.  | 2.4 tonne   | 2.85 tonne   |
| Maximum slope sideways, wheels in / wheels out  | 10° at full height (wheels at std) 12.5°<br>at full height (wheels at wide setting) | 12.5° at full height (wheels at std) 15° at full height (wheels at wide setting) |
| Maximum slope forwards, wheels in / wheels out  | 12.5° at full height  | 15° at full height   |
| Hydraulic 3 speed Ground Speeds km/hr<br>Three Speed Gear 1, 2, 3                                       | gear 1; 0-2, gear 2; 1-3.5, gear 3; 2-5.5,<br>km/hr                                 | gear 1; 0-2, gear 2; 1-3, gear 3; 2-5,<br>km/hr                                  |
| Wheel torque (Max)  | 4,990 Nm  | 5,700 Nm   |
| Standard Drive wheel tyre   | Single wheel drive 2 x 31x15.5x15, 8<br>ply, (790 Ø x 380 wide) tractor grip        | Bogie wheel drive 2 x 31x15.5x15, 8 ply,<br>(790 Ø x 380 wide) tractor grip      |
| Caster wheel tyre   | 2 x 26x12x12, 12 ply (620 Ø x 300 wide)   |  |
| Engine  | 23 HP, EFI V twin, OHV, Vanguard Petrol   |  |
| Squirrel Model  | 558 Crab Steer SD-D   | 638 Crab Steer Bogie SD-D  |
| Optional extra  |   |  |
| Diesel Engine Option extra  | Optional; 23hp Kubota D902 3 cyl water cooled                                       |  |
| One Man Cage Hand & Foot Control  | Optional  |  |
| Chain saw holders   | Optional  |  |
| Picking Bags: Standard or Deluxe  | Optional; Standard 4-5 bags per bin, Deluxe 5-6 bags per bin                        |  |
| Hydraulic Outlets in Cage   | Optional  |  |

Available through your local dealer Warranty 12 months 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.