# BACKSAVER CRANE CATALOGUE

## Backsaver Crane – Mark II with Extendable Boom (300 kg & 500 kg)







## There is an easier way

Don't take the risk to your back, equipment or business. If it's got to be lifted, do it the easy way, with a Backsaver Crane. The Backsaver Crane has the capacity to safely, simply and effectively lift and place loads of up to 300 kg and 500 kg.

## 300 kg and 500 kg Capacity Lift

The lifting capabilities of the Backsaver Crane are supplied by a 300 kg and 500 kg manual brake winch. To raise the load simply wind the handle, to lower the load wind the handle in the reverse direction. The winch incorporates a load friction brake which is automatically activated when the handle is released – keeping the load safely in position at all times.

#### Now available with 12 volt and 24 volt DC Electric Winches

The Backsaver Crane is the economical alternative to expensive vehicle mounted hydraulic cranes and is suitable for utilities, trucks and trailers, etc. The Crane is also suitable for industrial, marine and rural applications.

## Various coatings available - see page 6

Standard colours, Galvanised or Powder Coated White.



F19001CW 500 kg Powder coated white





#### The Backsaver Crane

The Backsaver Crane provides the perfect lifting solution to tradesmen, farmers, delivery drivers and anyone who has to lift loads of anything from fuel drums, jet skis, small boats, motor bikes, car engines ride-on- mowers, cement mixers, farm machinery, livestock, fence, brick cutters and even tractor tyres – the possibilities are endless. In fact if you have ever thought, "There's got to be a better way", chances are that we've already found it. Save money, save your back and ensure you're lifting ergonomically.

Important Safety Information

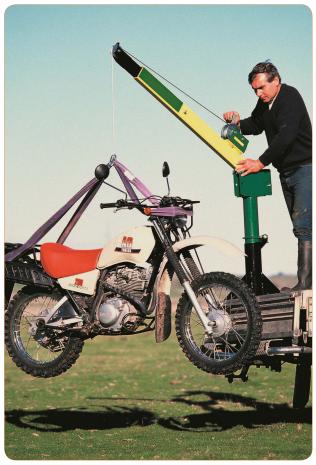
#### DO the following:

- Read carefully and comply with the guidelines set forth in the Owner's Manual.
- Keep hands away from the drum, gears, wire cable/fibre rope, and other moving parts of the equipment.
- Install the wire cable/fibre rope securely to the winch drum.
- Ensure at least 3 turns of wire cable/fibre rope wound on the drum at all times, to serve as an anchor wrap.
- Keep all unnecessary personnel away from the winch while in operation.
- Keep out of the path of the load should the wire cable/fibre rope break and snap back and cause injury.

#### DO NOT do the following:

- Do not lift people, or objects over people. Do not walk or work under a load or in the line of force of any load.
- Do not exceed the load rating of the winch or any other component in the system. To do so could result in failure of the equipment.
- Do not use more than one winch to move a load that exceeds the load rating of a single winch. A shift in load weight could overload the equipment.
- Do not use damaged or malfunctioning equipment. To do so could result in failure of the equipment.
- Do not modify the equipment in any way. To do so could cause equipment failure.
- Do not apply a load on the winch with the wire cable fully extended.

  Keep at least three full turns of cable/fibre rope on the drum.
- Do not wrap the wire cable/fibre rope around the load. This may damage the wire cable/fibre rope and could cause the load to slip/fall. Use a sling or other approved lifting device.
- Do not operate the winch with covers/guards removed or improperly installed.
- Do not divert your attention from the operation. Stay alert to the possibility of accidents, and try to prevent them from happening.
- Do not jerk or swing the load. Avoid shock loads by starting and stopping the load smoothly. Shock loads overload the equipment and may cause damage.
- Do not leave a suspended load unattended unless specific precautions have been undertaken and keep people away from the winch and out from under the load.







F12643 300 kg

## Backsaver Cranes - Options Available

#### Backsaver Crane – Mark II with Extendable Boom (300 kg) with F18230/5 Brake Winch

F12643 - Backsaver Crane 300kg with Cable F12643R - Backsaver Crane 300kg with Rope

F12643G - Galvanised Backsaver Crane 300kg with Cable F12643GR - Galvanised Backsaver Crane 300kg with Rope F12696E12 - Backsaver Crane 300kg with Rope

F12696E12 - Backsaver Crane 300kg with Electric Winch - Superwinch S4000 12V F12696E24 - Backsaver Crane 300kg with Electric Winch - Superwinch S4000 - Powder coated white Backsaver Crane 300kg with Cable F13643WR - Powder coated white Backsaver Crane 300kg with Rope

#### Backsaver Crane – Mark II with Extendable Boom (300 kg) with F18260/5 Brake Winch

F19001 – Backsaver Crane 500kg with Cable F19001R – Backsaver Crane 500kg with Rope

F19001E12 – Backsaver Crane 500kg with Electric Winch - Superwinch S5000 12V F19001E24 – Backsaver Crane 500kg with Electric Winch - Superwinch S5000 24V

F19001CW – Powder coated white Backsaver Crane 500kg with Cable F19001CWR – Powder coated white Backsaver Crane 500kg with Rope











F13643W Backsaver Crane mounted on wharf

## Backsaver Crane – Mark II with Extendable Boom (300 kg)

The Backsaver Crane is fitted with 3600 mechanical slewing by means of a worm drive gear. This eliminates the danger of the crane boom swinging out of control when the load is taken up. The boom can only be rotated (slewed) by operating the slewing control handle. This important safety feature keeps the load under control at all times – essential for one person operation.

With a choice of two models, the Backsaver Crane suits a host of reach and lift requirements. With an extendable position action, all cranes have a boom reach of over 1 metre at their 300 kg and 500 kg lift positions. Both models have a choice of boom angle settings for even greater adaptability.

If it's got to be lifted, do it the easy way, with a Backsaver Crane.

F12643 – Backsaver Crane 300kg

F12643G - Galvanised

F12696Exx - Electric Winch - Superwinch S4000

F13643W - Powder coated white

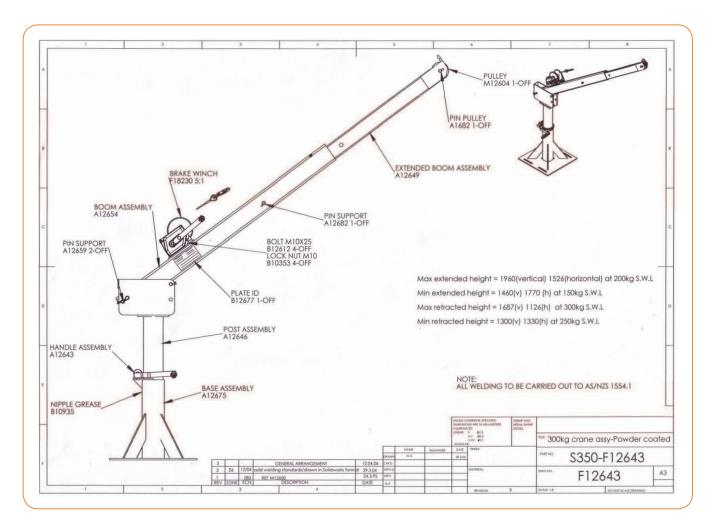
Options - not applicable to F12696Exx

R-denotes fibre rope instead of wire cable (Backsaver cranes only)

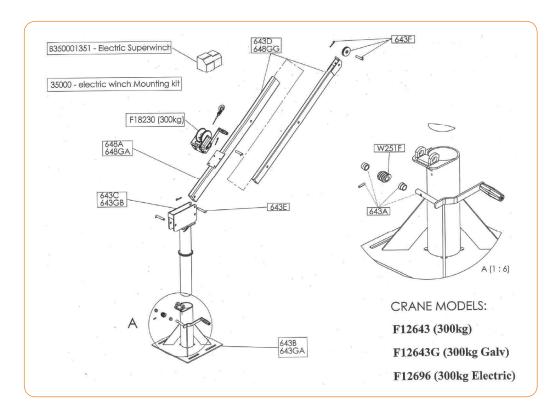


Max extended height(mm) = 1960 (vertical) 1526 (horizontal) at 200 kg S.W.L

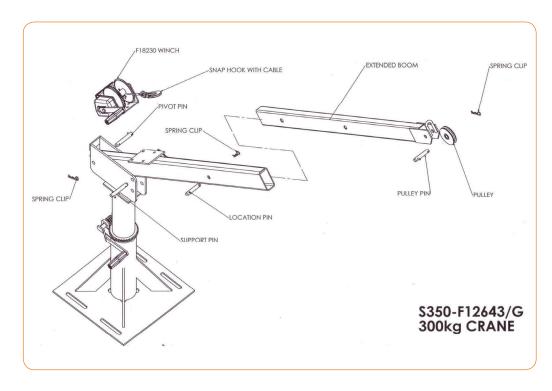
Min extended height (mm) = 1460 (v) 1770 (h) at 150 kg S.W.L Max retracted height (mm) = 1687 (v) 1126 (h) at 300 kg S.W.L Min retracted height (mm) = 1300 (v) 1330 (h) at 250 kg S.W.L



# Spare parts listing for Backsaver Crane – 300 kg



# Exploded view of the F12643 (300 kg) Backsaver Crane



# Backsaver Crane – Mark II with Extendable Boom (500 kg)

The simple design of the Backsaver Crane means it is easy to assemble and can be fitted almost anywhere – to jetties, utes or tray tops and to a wide variety of fixed platforms. When a Backsaver Crane is vehicle mounted and the time comes to change vehicles, it is simple to remove and leaves only four holes. The Backsaver Crane is then ready to install elsewhere. The Backsaver Crane's simple operation means that little can go wrong and service support is available through Spare parts distributors around Australia.

The Backsaver Crane provides the perfect lifting solution to tradesmen, farmers, delivery drivers and anyone who has to lift loads of anything from fuel drums, jet skis, small boats, motor bikes, car engines, ride-on-mowers, cement mixers, farm machinery, livestock, fence, brick cutters and even tractor tyres – the possibilities are endless.

F19001 – Backsaver Crane 500kg

F19001Exx - Electric Winch - Superwinch S5000

F19001CW - Powder coated white

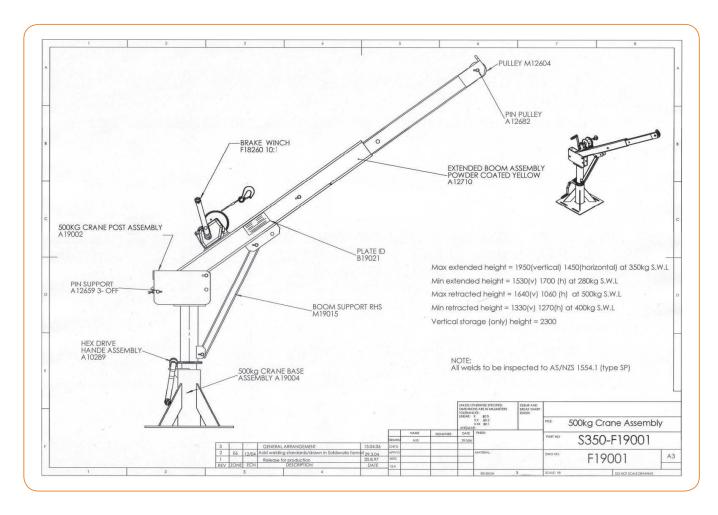
Options - not applicable to F19001Exx

R-denotes fibre rope instead of wire cable (Backsaver cranes only)

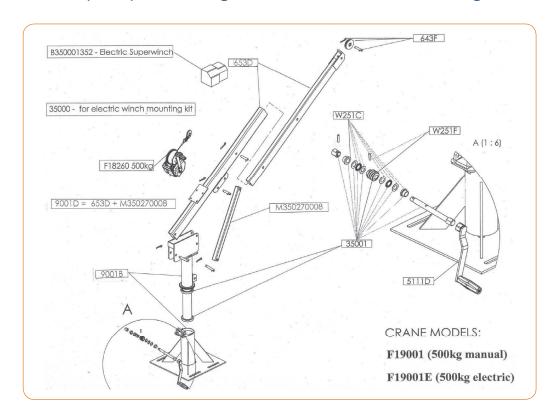


Max extended height (mm) = 1950 (vertical) 1450 (horizontal) at 350 kg S.W.L

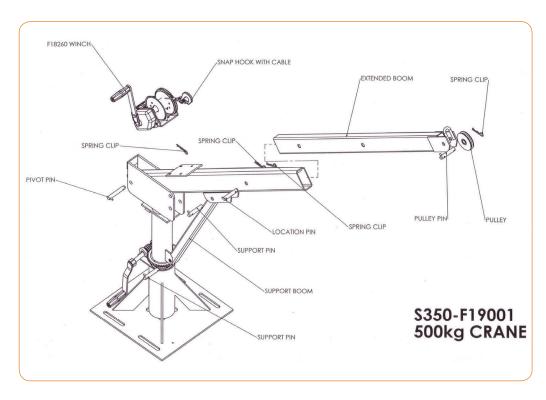
Min extended height (mm) = 1530 (v) 1700 (h) at 280 kg S.W.L Max retracted height (mm)= 1640 (v) 1060 (h) at 500 kg S.W.L Min retracted height (mm) = 1330 (v) 1270 (h) at 400 kg S.W.L Vertical storage (only) height (mm) = 2300



# Spare parts listing for Backsaver Crane – 500 kg



# Exploded view of the F19001 (500 kg) Backsaver Crane



## Backsaver Crane Assembly and Operating Instructions

- 1. Ensure the unit is correctly anchored via the base-plate to the operating platform.
- 2. Attach the boom to the post with the pivot pin and support pin.
- 3. Ensure the spring clips are fitted to the pivot pin and to the support pin.
- 4. Bolt the winch to the boom using 4ea M10 bolts, nuts and washers.
- 5. Thread the winch cable and hook it through the slot at the front of the boom.
- 6. Attach the pulley to the boom with the pulley pin and spring clips.

Please note: The Post and Base of the 500kg Backsaver Crane cannot be separated for installation.

#### Operation

- 1. Ensure that the operating platform is steady. If the unit is vehicle mounted then it should be positioned on a stable and horizontal surface with neutral or park gear selected and hand brake activated.
- 2. Release the hook from the base of the crane.
- 3. Rotate the boom by turning the slewing handle until the hook is positioned directly over the load (Never attempt to lift the load without the boom being position directly over the load).
- 4. Attach the hook securely to the load.
- 5. Standing clear of the load, raise the load by turning the winch handle clockwise.
- 6. When the load is at the desired height, slew the load to the required position.
- 7. Lower the load by turning the winch handle anticlockwise.
- 8. If the load has been lowered onto a vehicle tray then the load should be secured (Do not travel with load attached to the crane).
- 9. Secure the hook into one of the four braces and take up the slack in the cable to secure the boom.

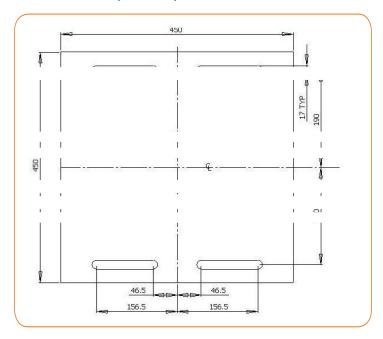
#### Maintenance

- 1. Clean and lubricate the following as required with appropriate grease:
  - Winch gears and pinion threads
- Pivot pin
- Slewing worm and handle

· Winch cable

- All bushes
- · Base tube
- 2. Inspect the gears, bushes and cable monthly for wear and replace as required.

## Backsaver Cranes – Bolt-down plate specs.



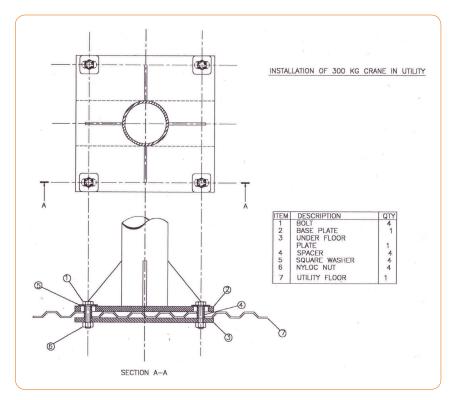
Please Note: Winches are not intended for the movement of people.

## Vehicle installation of Backsaver Crane (300 kg and 500 kg)

To provide a minimum safety factor at the crane's maximum capacity (jib in short position), the general mounting arrangement (expected to provide good long term service) should consist of the following additional equipment and conditions:

- 1.  $2 \text{ ea. } 100 \text{ mm} \times 10 \text{ mm} \times 450 \text{ mm}$  long steel plates drilled appropriately to suit crane base plate bolt pattern (see previous page).
- 2. 4 ea. M16 HH 8.8 bolts with ferrule spacers on each bolt to take up the bolt shank to mounting hole clearance with M16 nylocs.
- 3. Large above floor washers (M16) are used under the bolt heads.
- 4. The under floor plates must sit flat against the underside surface.

The Backsaver Crane has a large mounting base that sits flat on the vehicle floor and is anchored to the floor with 10 mm flat under floor plates. Each plate is mounted transversely across the full width of the main crane base (above the floor) and is not less than 100 mm wide. Due to the nature of mounting through corrugated floor structure it is recommended that regular inspection is undertaken to ensure that the mounting stay secure and no cracking of the floor become evident.







Mountings on vehicle tray top (L) and underside (Above)

#### 8000 Series Brake Winch

5:1 / 10:1 ratio models (300-500 kg) - available for Backsaver Cranes

F19001(500 kg) Model: F12643(300 kg) Cable F18230 F18260 Fibre Rope F18235 F18265 Gear Ratio 5:1 10:1 Application Lifting Lifting **Rated Capacity** 300 kg (2940N) 500 kg (4900N) Mass (Winch only) 6 kg 6 kg

Type of Brake Self Actuating Self Actuating
Drum Diameter 50 mm 50 mm
Flange Diameter 130 mm 130 mm
Drum Width 52 mm 52 mm
Cable / Fibre Rope size 0 5 mm / 0 6 mm / 0 6 mm / 0 6 mm

15 m x Ø 5 mm 12 m x Ø 6 mm Maximum Cable Capacity Maximum Fibre Rope Capacity 12 m x Ø 6 mm 12 m x Ø 6 mm Max. Effort on handle at Rated Load 26 kg 18 kg Cable Breaking Strain 1855 kg 2712 kg Fibre Rope Breaking Strain 2050 kg 2050 kg 7.5 m x Ø 5 mm 7.5 m x Ø 6 mm Cable (Galv) as supplied  $7.5\,m\,x\,\emptyset\,\,6\,mm$ 7.5 m x Ø 6 mm Fibre Rope as supplied

Snap Hook

Snap Hook

#### Notes:

#### Features include:

Heavy duty 4 mm winch body, Steel bushes, Self actuating brake mechanism, Fully enclosed brake, Spare parts available, Electroplated zinc cobalt, Powder coated finish, Detachable handle.

**Fastening Device** 

F18230 / F18235 are used on 300 kg Backsaver Crane – Product Code: F12643 F18260 / F18265 are used on 500 kg Backsaver Crane – Product Code: F19001

Recommended for lifting applications.

Common user problem with this range of winches is the brake mechanism does not work when first assembled. When packaged, the winch and handle are separate and need to be assembled as per the instructions included. (see next page).

#### Handle Assembly is:

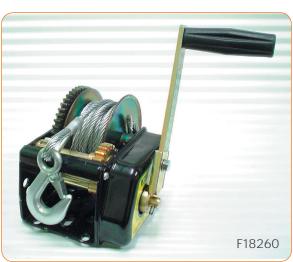
The handle adaptor is turned clockwise until the ratchet is engaged prior to attaching the handle and securing with screw.

Self actuating brake requires a minimum of 18 kg to operate safely.

### Warning

- Read and understand operating instruction before using these winches.
- Do not use the Boat Trailer Winches for lifting purposes.
- Never lift or pull more than the rated capacities of the winches.
- Ensure cables or webbing is correctly secured before using these winches.
- Never apply a load on the winch with the cable fully extended, always ensure there
  is at least three full wraps of cable on the winch drum at all times.
- Always ensure the winch is securely attached to the structure and that the structure is capable of withstanding the intended load before operating the winch.
- Never apply grease or oil on the braking mechanism of the winch.





# Attaching handle to the 8000 Series Brake Winch

#### Handle Attachment Procedure:

Note: Handle instructions (below) are included in packaging.

Step 1: Turn handle adaptor clockwise until ratchet has engaged.

Step 2: Attach the handle once the ratchet has engaged.



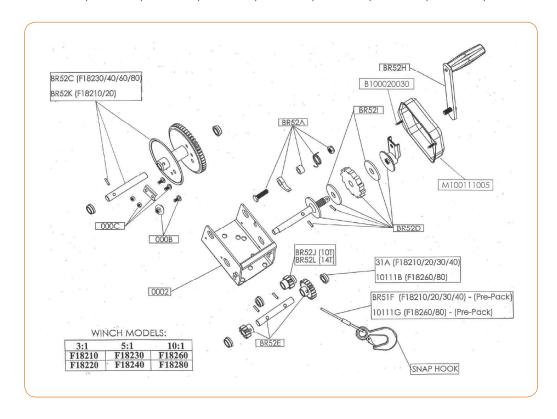




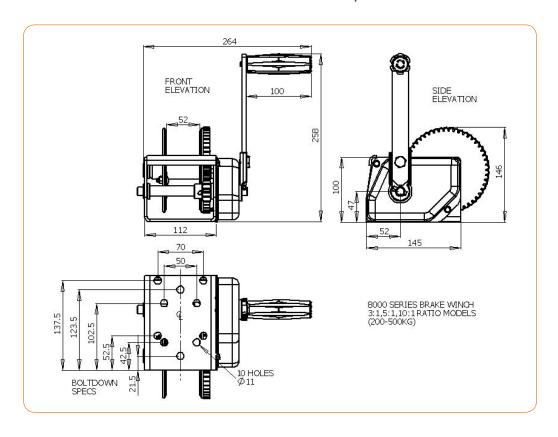


An F18260 Brake Winch mounted on a F19001 Backsaver Crane

# 8000 Series Brake Winches - Spare parts listing F18210, F18215, F18220, F18230, F18235, F18240, F18260, F18265, F18280



# Front and side elevation and bolt-down specifications/dimensions



Please Note: Winches are not intended for the movement of people.

## X6 Fibre Rope (Dynex 75)

#### General Information

The ropes are impregnated with Duracoat to improve abrasion resistance and endurance.

Diameter of rope	Weight pr. 100 metres	Minimum breaking strength		Minimum breaking strength (assy in Winches)	
(mm)	(kg)	(tonne)	(kN)	(tonne)	(kN)
6	2.3	4.2	40.8	2.05	20.0

### **DYNEX Rope Constructions and Properties**

Hampidjan's DYNEX 75 ropes are made from DSM's Dyneema® SK75 fibres. The main focus is on the 12-strand braided ropes which have proven very popular for their roundness and smooth surface.

- These ropes combine good strength retention with good flexibility and dynamic properties.
- Termination is easy through splicing where up to 90% of linear strength is retained.

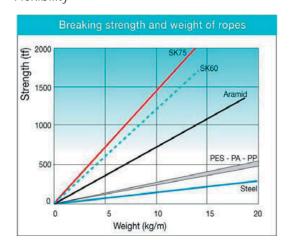
#### DYNEX fibre ropes:

- Exceed the strength of steel wire ropes of same diameter while floating on water.
- · Have low elongation properties.
- · Are extremely flexible, yielding easy handling in all respects.
- Have good UV resistance and excellent resistance to chemicals.



#### Dyneema SK75 Fibre Properties

Density
Tenacity
Modulus
Elongation
Melting Point
Resistance to Chemicals
UV Resistance
Flexibility



# **HAMPIÐJAN**



Tested in accordance with OCIMF specifications