

## Belly Pan Hoist

The Trilift® Belly Pan Hoist (*Part No. TL10023*) has been designed and manufactured for the easy and safe removal of the belly pan from dozers, scrapers etc., in areas of difficult terrain such as on wet wash down pads and rough workshop floors.



## Why do you need a Trilift® Belly Pan Hoist?

We all know safety in the mining industry is paramount and as such the old methods of removing vehicle components is no longer adequate. Traditionally, maintenance personnel would use a mobile crane, chain and sling to remove a belly pan from a vehicle, which is dangerous and occasionally fatal.

Hedweld have designed and manufactured the Belly Pan Hoist for the easy and safe removal of the belly pan from dozers, scrapers etc., in areas of difficult terrain such as on wet wash down pads and rough workshop floors.

The Belly Pan Hoist has two, 250mm diameter castor wheels at the handle end to enable easier movement over a rough workshop floor. A hydraulic motor powered 300mm diameter rubber wheel at the other end of the table frame ensures that optimum traction is achieved.



The top plate of the Belly Pan Hoist has been pre-drilled to accept a range of component specific Trilift® jigs and other tooling, making this tool quite versatile in the removal of small OEM vehicle components. These include:

- Slope Jig (Part No. TL10006)
- Cat 793 A-Frame Pin Tool (Part No. TL10022)
- Pump Jig (Part No. TL10021)
- Component Balance Tool (Part No. TL11001)
- Ball Cap Jig (Part No. TL10019)
- T282 Steering Link Jig (Part No. TL10024)

Specification sheets are available for each of these jigs.



### What our customers said when asked about the Trilift® Belly Pan Hoist:

“The Belly Pan Hoist has provided more safety and less time to remove our belly pans. Before when we used the chain/sling there was no way of telling when the sling could break when adjusted with the overhead crane. Additionally the overhead crane has a lot of movement making it difficult to account for tightness or controlled accurate tension of the chain. As chains do not have stretch or give, it could break at any time if our guys were not careful.” With the Hedweld tool, “we have finer control, and much more safety”.

**Verlyn Cook Mine Maintenance Supervisor at Simplot Phosphates LLC.**



## Features and Benefits

- One person, self-propelled operation - more efficient
- Easy maneuverability over rough floors
- Convenient low profile access to underside of dozer
- Frame designed to ensure that the Belly Pan can be removed without jacking up the vehicle - saving time
- Adjustable height - 285mm to 1100mm
- 360° turntable rotation for precise pan location
- Air over hydraulic operation so it quickly taps into the workshop's air supply
- Maximum safe lifting capacity of 700kgs to ensure stability when supporting a belly pan
- Can safely lower a Belly Pan full of debris with a total mass of 1400kgs
- Has support springs fitted to the tee bar handle to reduce operator fatigue

## Common sense

The Trilift® Belly Pan Hoist is one of Hedweld's top selling products simply because it applies common sense to a long existing problem.

Using this tool with its associated jigs makes the maintenance of mining and earthmoving vehicles safer and does it in a more time, space and resource efficient manner.

### What our customers said when asked about the Trilift® Belly Pan Hoist:

"The Belly Pan Hoist is so much more stable and we feel confident and safe when we use it. Not only was the safety factor improved but so was the stability of the machine when removing the Belly Pan."

**Darren, mechanic for Hibbing Taconite.**

At Hedweld we have a vision that all workshop bays are being used efficiently, utilising specialised tooling that is purpose built for component handling, with the ultimate outcomes of:

**minimising workplace injuries and maximising availability.**



# Specifications

The Trilift® Belly Pan Hoist is compliant with the following standards:

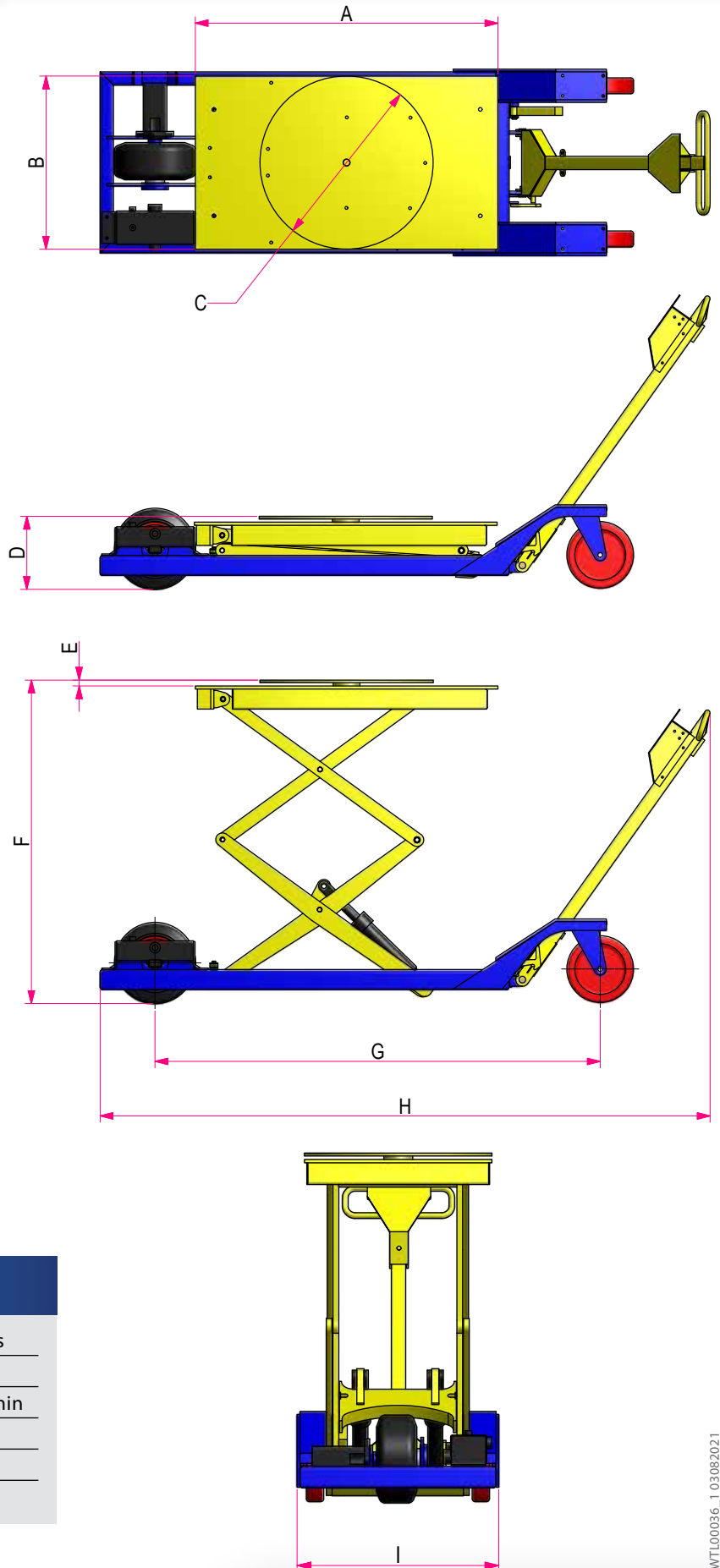
- AS 3990:1993 Mechanical equipment-steelwork.
- AS/NZS 1554.1:2011 Structural Steel Welding.
- AS 1418.1:2002 Cranes, hoists and winches.
- AS 1163:2009 Structural steel hollow sections.
- AS/NZS 1594:2002 Hot-rolled steel flat products.
- AS/NZS 3678:2011 Structural steel.
- AS/NZS 3679.1:2010 Hot-rolled bars and sections.
- AS/NZS 1252:1996 High strength steel bolts with associated nuts and washers for structural engineering

## Key Dimensions

A	Table length	1136 mm	45 in
B	Table width	650 mm	25 in
C	Turnable diameter	650 mm	25 in
D	Lowered height	274 mm	11 in
E	Turntable height	22 mm	1 in
F	Raised height	1214 mm	48 in
G	Wheel centres	1686 mm	66 in
H	Overall length	2292 mm	90 in
I	Overall width	700 mm	28 in

## Key Operating Data

Working Load Limit	700 kgs	1,540 lbs
Tare Weight	450 kgs	992 lbs
Travel Speed	3.2 m/min	10.5 ft/min
Hydraulic Oil Tank Capacity	2.4L approx	0.63 gal
Motor	Air motor 1/3 hp	-
Nominal Air Pressure	6.9 bar	100 psi



# Belly Pan Hoist Tooling

## Slope Jig (Part No. TL10006)

To allow for the sloping bottom of some belly pans and sumps, Hedweld have developed a jig which bolts onto the turntable of the Trilift® Belly Pan Hoist (Part No. TL10023), to enable safer raising and lowering of the pan. The device has a hinged frame, which is raised or lowered to vary the angle, by using a screw actuator.



### Key Operating Data

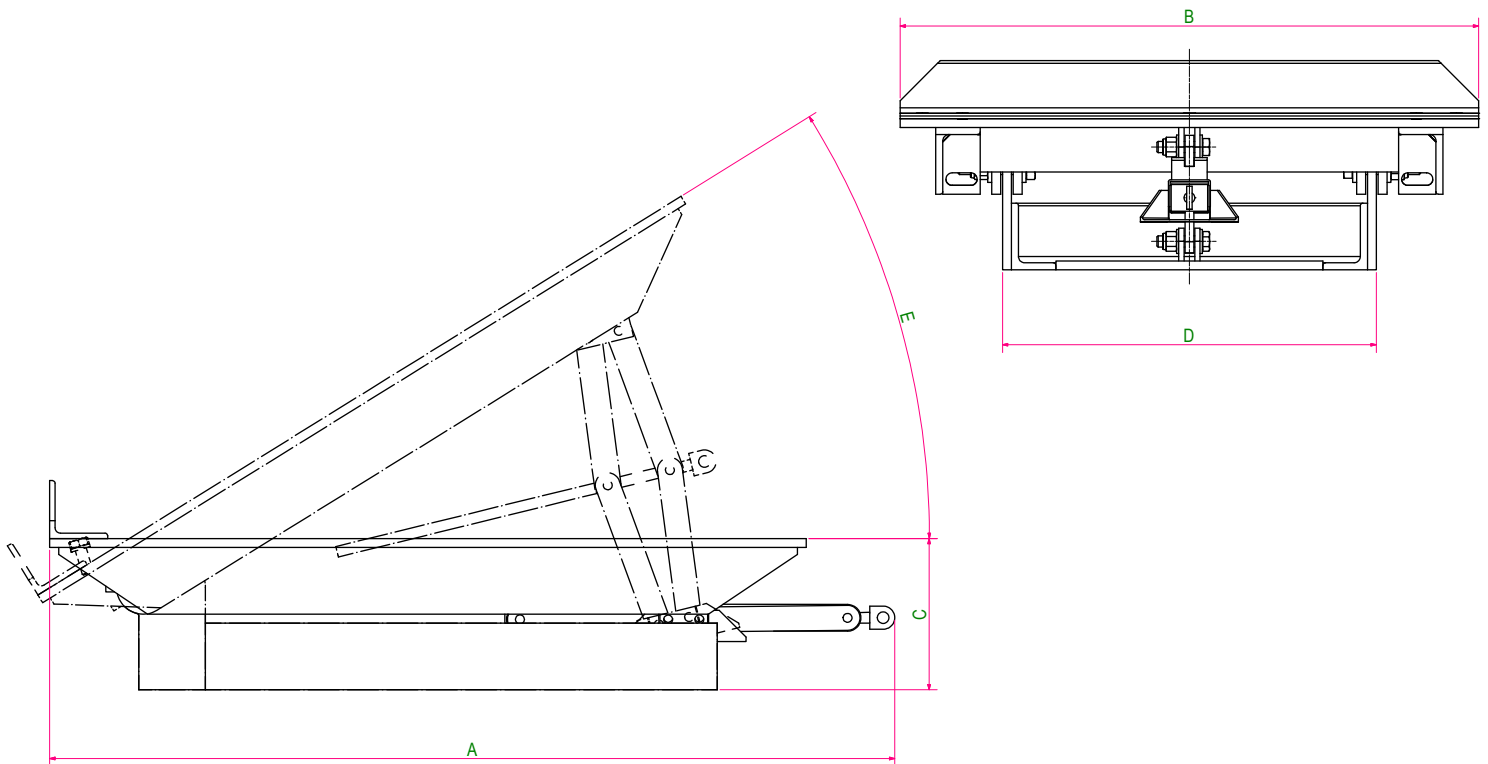
Working Load Limit	700 kgs	1543 lbs
Tare Weight	90 kgs	198 lbs

### Key Dimensions

A	Length	950mm	37in
B	Width	650mm	26in
C	Height	170mm	7in
D	Base-frame width	420mm	17in
E	Tilt angle	32 degrees	-

The Slope Jig is compliant with the following standards:

- AS 3990-1993 Mechanical equipment-steelwork.
- AS/NZS 1554.1:2011 Structural Steel Welding.
- AS/NZS 3678:2011 Hot-rolled plates, floor plates and slabs
- AS/NZS 3679.1:2010 Hot-rolled bars and sections.
- AS/NZS 1163:2009 Cold formed structural steel hollow sections.
- AS/NZS 1252:1996 High strength steel bolts with associated nuts and washers for structural engineering



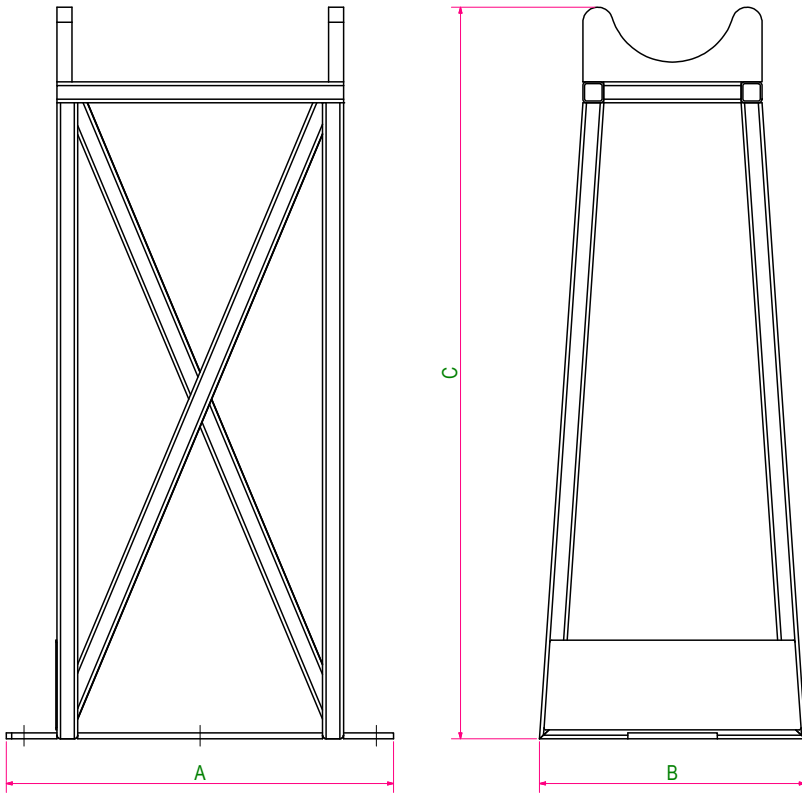
## Belly Pan Hoist Tooling

# Pump Jig (Part No. TL10021)

The Trilift® Pump Jig has been developed to assist in the removal and installation of hydraulic pumps from beneath large mining trucks eg. steering and hoist pumps.

### Key Operating Data

Working Load Limit	400 kgs	881 lbs
Tare Weight	27 kgs	59 lbs



### Key Dimensions (approximately)

A	Length	650mm	26in
B	Width	445mm	18in
C	Height	1225mm	48in



Maintenance Support Equipment

### Features

- Eliminates manual handling
- Integrates with Trilift® Belly Pan Hoist (Part No. TL10023)

The Pump Jig is compliant with the following standards:

- AS 3990-1993 Mechanical equipment-steelwork.
- AS/NZS 1554.1:2011 Structural Steel Welding.
- AS/NZS 3678:2011 Hot-rolled plates, floor plates and slabs
- AS/NZS 3679.1:2010 Hot-rolled bars and sections.
- AS/NZS 1163:2009 Cold formed structural steel hollow sections.
- AS/NZS 1252:1996 High strength steel bolts with associated nuts and washers for structural engineering



# Belly Pan Hoist Tooling Component Balance Tool

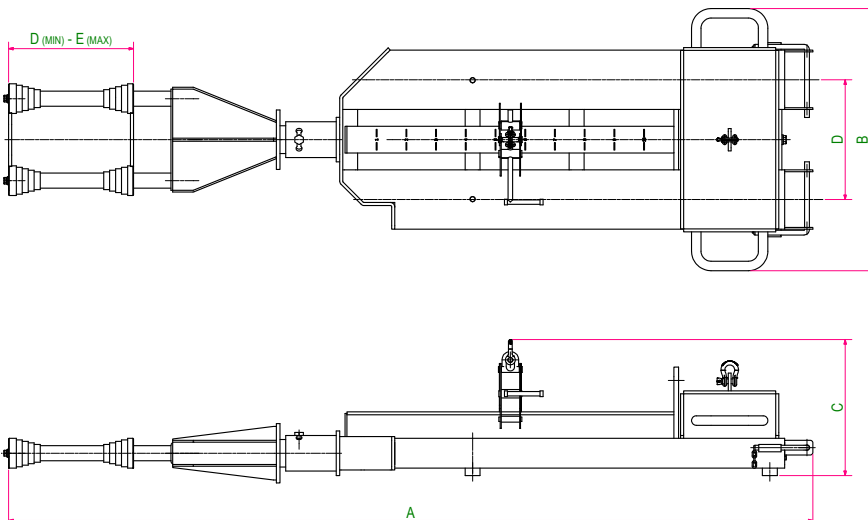
(Part No. TL11001)

The Trilift® Component Balance Tool has been developed to assist in the removal of components such as track rollers, haul truck axles and inspection covers. The Trilift® Component Balance Tool is easily mounted to the top of the Trilift® Belly Pan Hoist (Part No. TL10023) and is an excellent addition to existing tooling.

The Trilift® Component Balance Tool includes a Track Roller Adapter (Part No. HW75363) to assist in the removal of track rollers. This adapter can be easily adjusted to fit a wide range of track rollers. The adjustable red spacers allow for worn rollers to sit accurately in the adapter for safe removal. The Trilift® Track Roller adapter also allows for a 30° angle adjustment.



The Component Balance Tool also includes an Axle Adapter (Part No. HW75366) to assist in the removal of axle.



Maintenance Support Equipment



## Features

- 3 methods of handling:
  - Trilift® Belly Pan Hoist
  - Crane
  - Forklift
- Eliminates manual handling
- Adjustable for range of component weights

## Key Operating Data

Working Load Limit	300 kgs	661 lbs
Tare Weight	500 kgs	1102 lbs

The Component Balance Tool is compliant with the following standards:

- AS 3990-1993 Mechanical equipment—Steelwork.
- AS/NZS 1554.1-2011, Structural Steel Welding.
- AS 1418.1-2002 Cranes, hoists and winches.
- AS 1163- Structural steel hollow sections.
- AS/NZS 1594, Hot-rolled steel flat products.
- AS/NZS 3679, Structural Steel.

## Key Dimensions

A Length	2706mm	107in
B Width	882mm	35in
C Height	458mm	18in
D Tyne pocket width	403mm	16in
E Adjustable slider min	215mm	8in
F Adjustable slider max	545mm	21in

## Belly Pan Hoist Tooling

# Cat 793 A-Frame Pin Tool

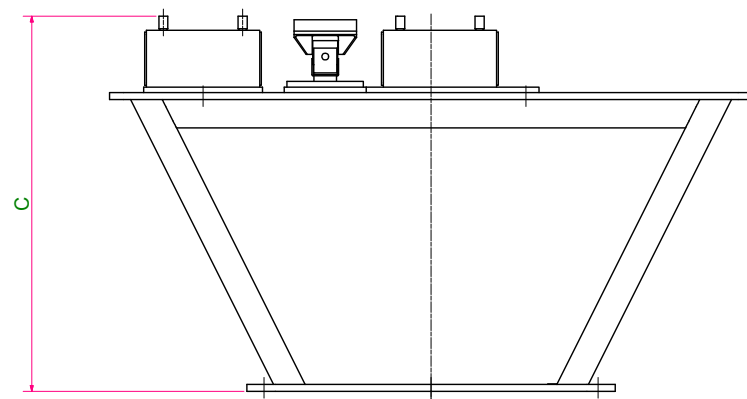
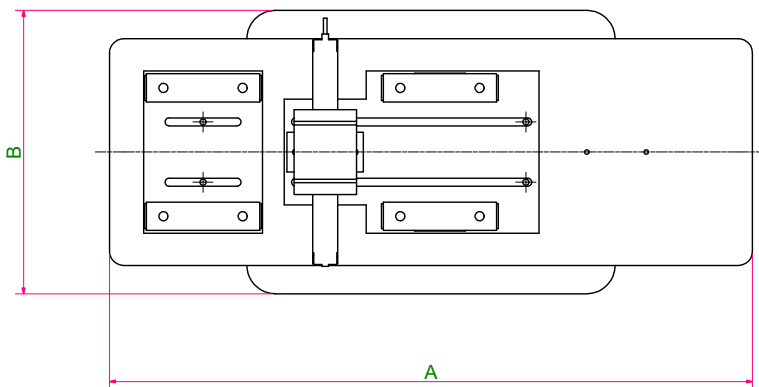
(Part No. TL10022)

The Trilift® Cat 793 A-Frame Pin Tool is designed for the removal of the A-frame connection pin and mounting blocks that connect the wish bone to the chassis on most Cat trucks. After the bolts have been removed, the wish bone is then lowered onto the chassis rail. The Trilift® Cat 793 A-Frame Pin Tool is then positioned in place for the safe removal and installation of the 2 mounting blocks and A-frame connection pin.

The current method of installation and removal can prove to be a difficult operation as the pin and mounting blocks are heavy and the working environment is confined. The A-Frame Pin Lifting Tool complements the Trilift® range of Belly Pan Hoist Jigs. **Note: not suitable for Cat 793F trucks.**

### Key Operating Data

Working Load Limit	400 kgs	881 lbs
Tare Weight	100 kgs	220 lbs



Maintenance Support Equipment

### Features

- Eliminates manual handling
- Integrates with Trilift® Belly Pan Hoist (Part No. TL10023)
- Tilt adjustable

The Cat 793 A-Frame Pin Tool Jig is compliant with the following standards:

- AS 3990:1993 Mechanical equipment-steelwork.
- AS/NZS 1554.1:2011 Structural Steel Welding.
- AS 1163:2009 Structural steel hollow sections.
- AS/NZS 1594:2002 Hot-rolled steel flat products.
- AS/NZS 3678:2011 Hot rolled plates, floor plates and slabs.
- AS/NZS 3679.1:2010 Hot-rolled bars and sections.
- AS/NZS 1252:1996 High strength steel bolts with associated nuts and washers for structural engineering

### Key Dimensions (approximately)

A Length	1135mm	45in
B Width	500mm	20in
C Height	662mm	26in





## Belly Pan Hoist Tooling

# Ball-Cap Jig (Part No. TL10019)

The Trilift® Ball-Cap Jig when used in conjunction with the Trilift® Belly Pan Hoist has been designed and manufactured for the safe and efficient handling of ball-caps on Letourneau Loaders.



The Ball-Cap Jig is compliant with the following standards:

- AS 3990:1993 Mechanical equipment-steelwork.
- AS/NZS 1554.1:2011 Structural Steel Welding.
- AS/NZS 3678:2011 Hot-rolled plates, floor plates and slabs.
- AS/NZS 3679.1:2010 Hot-rolled bars and sections.
- AS/NZS 1163:2009 Cold formed structural steel hollow sections.
- AS/NZS 1252:1996 High strength steel bolts with associated nuts and washers for structural engineering.



Maintenance Support Equipment

### Key Operating Data

Working Load Limit	200 kgs	441 lbs
Tare Weight	48 kgs	106 lbs

### Key Dimensions

A	Height extended	1392mm	54.8in
B	Jig tilt angle	0 - 50 degrees	
C	Jig length	690mm	27in
D	Jig height	376mm	14.8in
E	Jig support plate height	200mm	7.8in
F	Jig support plate length	303mm	12in
G	Jig support plate width	474mm	18.6in

