

## Belly Pan Hoist

The Trilift<sup>®</sup> Belly Pan Hoist model DT (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 model DT has two, 9.8 inch diameter castor wheels at the handle end to enable easier movement over a rough workshop floor. A hydraulic motor powered 11.8 inch 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
- 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 1,540 lbs to ensure stability when supporting a Belly Pan
- Can safely lower a Belly Pan full of debris with a total mass of 3086 lbs
- 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, utilizing specialized tooling that is purpose built for component handling, with the ultimate outcomes of:

**minimizing workplace injuries and maximizing availability.**

## Specifications

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

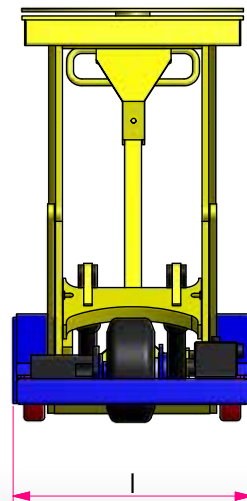
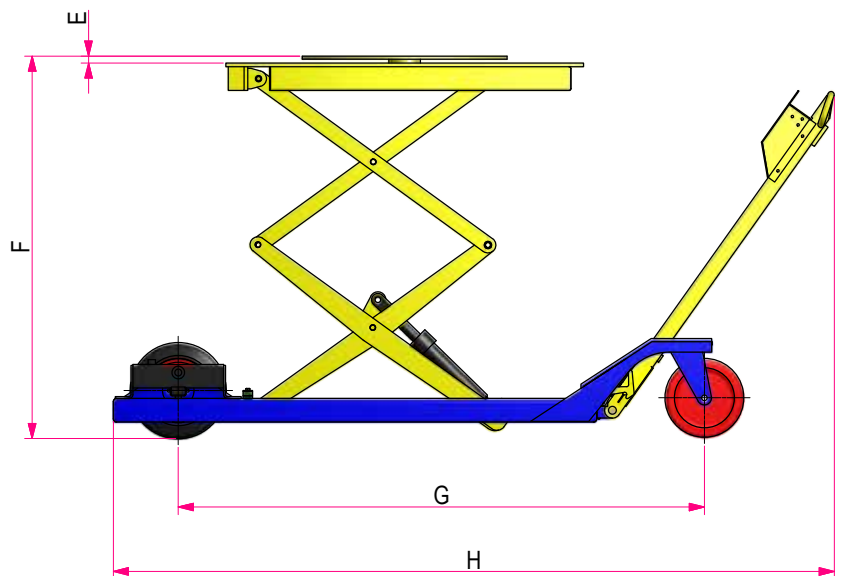
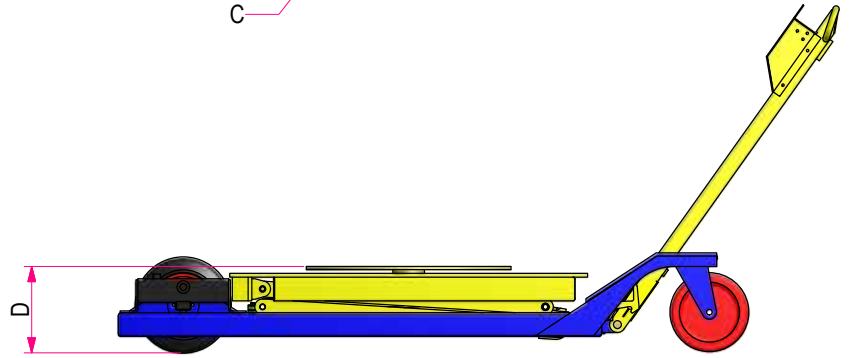
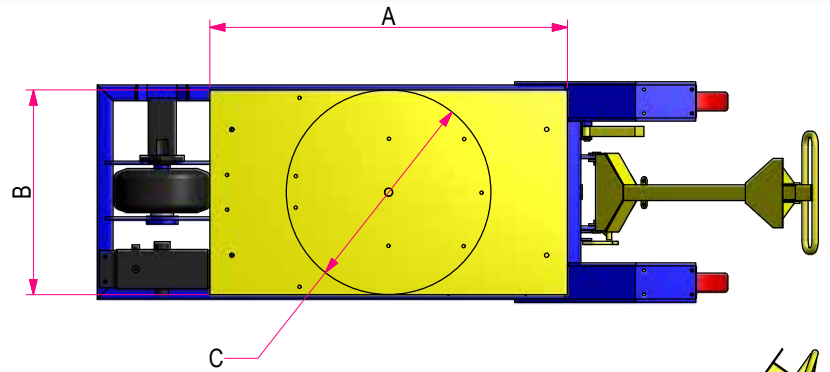
- ● AS 3990:1993 Mechanical equipment-steelwork.
- ● AS/NZS 1554.1:2011 Structural Steel Welding.
- ● AS 1163:2009 Structural steel hollow sections.
- ● AS/NZS 1594:2002 Hot-rolled steel flat products.
- ● AS/NZS 3678:2011 Hot rolled plates, floor plates and slabs.
- ● AS/NZS 3679.1:2010 Hot-rolled bars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

### Key Dimensions

A	Table length	45 in	1136 mm
B	Table width	25 in	650 mm
C	Turnable diameter	25 in	650 mm
D	Lowered height	11 in	274 mm
E	Turntable height	1 in	22 mm
F	Raised height	48 in	1214 mm
G	Wheel centres	66 in	1671 mm
H	Overall length	90 in	2289 mm
I	Overall width	28 in	700 mm

### Key Operating Data

Working Load Limit	1,540 lbs	700 kgs
Tare Weight	774 lbs	470 kgs
Travel Speed	10.5 ft/min	3.2 m/min
Hydraulic Oil Tank Capacity	0.63 gal	2.4L approx
Motor	Air motor 1/3 hp	-
Nominal Air Pressure	100 psi	6.9 bar



# 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.



Maintenance Support Equipment



### Key Operating Data

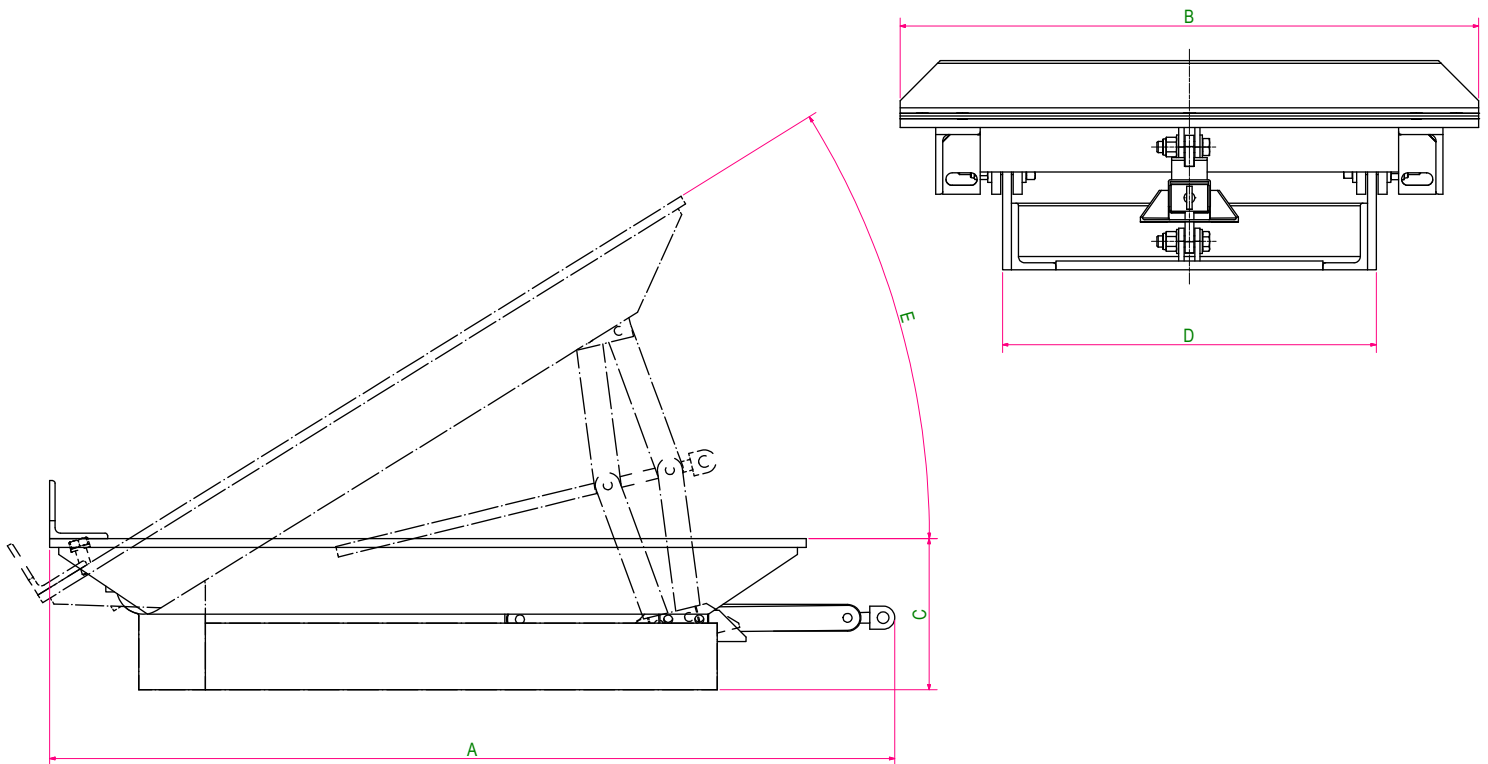
Working Load Limit	1543 lbs	700 kgs
Tare Weight	198 lbs	90 kgs

### Key Dimensions

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

# Cat 793 A-Frame Pin Tool

(Part No. TL10022)

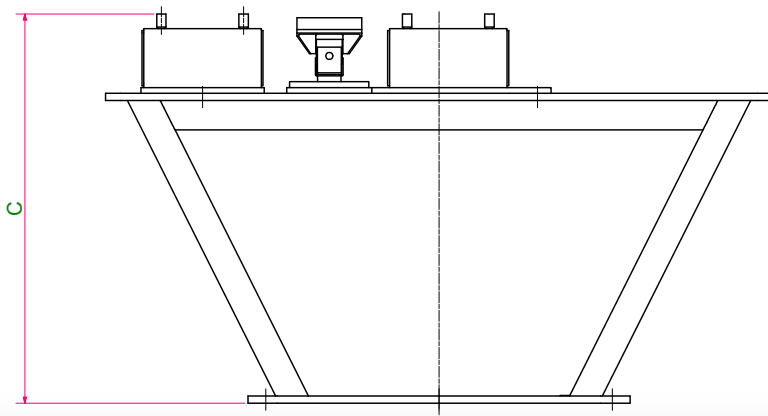
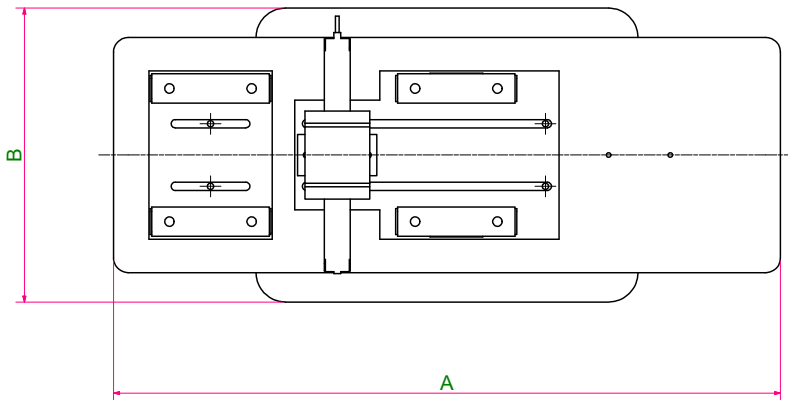
The Trilift® Cat 793 A-Frame Pin Tool is designed for the removal of the A-frame connection pin and mounting blocks that connect the wish bone to the chassis on most Cat trucks. After the bolts have been removed, the wish bone is then lowered onto the chassis rail. The Trilift® Cat 793 A-Frame Pin Tool 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 new 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	881 lbs	40 kgs
Tare Weight	220 lbs	100 kgs



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



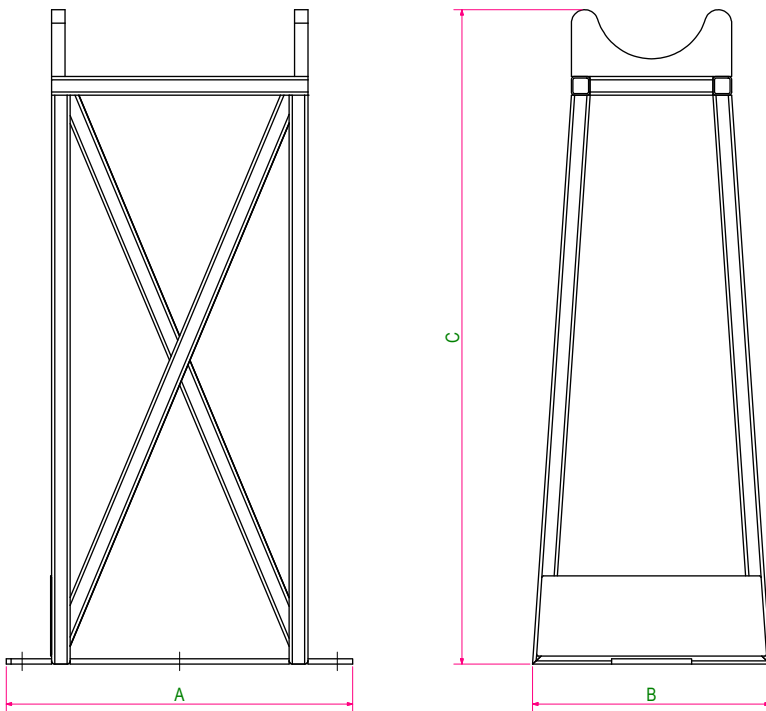
## Belly Pan Hoist Tooling

# 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	881 lbs	400 kgs
Tare Weight	59 lbs	27 kgs



### Key Dimensions (approximately)

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



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

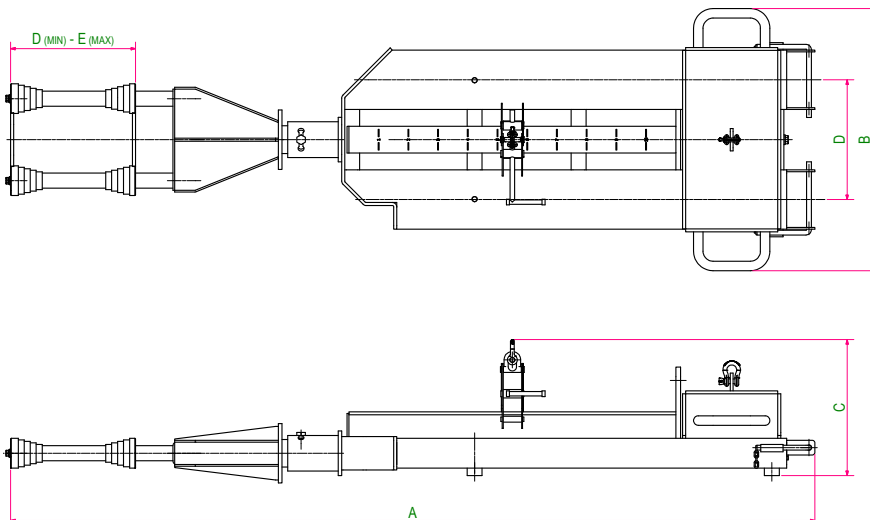
Working Load Limit	661 lbs	300 kgs
Tare Weight	1102 lbs	500 kgs

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





## 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	441 lbs	200 kgs
Tare Weight	106 lbs	48 kgs

### Key Dimensions

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

