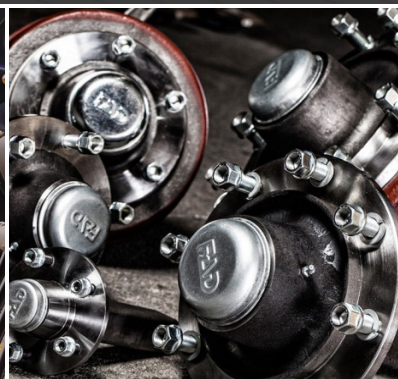


# OTR TYRES WHEELS AXLES AXLE CATALOGUE







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MADE IN AUSTRALIA

# AGRICULTURAL AXLES

OTR - Tyres Wheels Axles proudly manufactures Australia's largest range of agricultural axles. These axles are manufactured in Australia to suit Australian conditions.

The range of components described in this catalogue is broad but not exhaustive and mostly shows our standard or "off-the-shelf" items. Specifications may vary from time to time as products are improved or new additions are made to our line-up to better serve you, the customer.

To assist you gather price and technical data we've introduced "Fastrack Enquiry" pages. Just copy these and fax to us and we'll attend to your query promptly - mostly same day. Alternatively, call our technical department on 1300 CALL OTR.

If you can't find the axle product you're looking for, chances are we can make it for you. Axles are our business from drawing board to prototype and finally to low or high volume production runs at the right price.

Support Australian manufacturing, buy Australian.





# PRODUCTS BUILT WITHOUT COMPROMISE

## SPIDER STUB AXLES

Only one size available. 100mm square shaft with 5 spike spider type hub. Designed to use demountable 20" and 22.5" truck wheels with 28 degree mounting flange. Spider stub axle assembly will only accept dual wheels. Capacity per assembly is 6,000kg or 12,000kg for full axle.

## DOUBLE SIDED STUB AXLES

This stub axle assembly was designed for a Castor wheel, where the axle protrudes on both sides of the hub. Mounting is done by an arm on both sides of the wheel (also referred to as a yoke). Capacities range from 500kg to 7,000kg, each 5 stud hubs to 10 stud on 335 PCD.

## FULL AXLE

These are manufactured using a round or square shaft with hubs designed to suit your application. Hubs have high speed tapered roller bearings. Most of our axles are manufactured to European specifications, i.e: 5 on 140 PCD, 6 on 205 PCD, 8 on 275 PCD, 10 on 335 PCD, however specials can be accommodated. 3,000kg & above have triple lipped seals & bolt on caps.

**Capacities:** 1,000kg to 40,000kg    **Shaft Size:** 39ø to 150ø | 40ø to 100ø    **Axle Lengths:** Up to 5,000mm long

## BRAKED STUB AXLES

Designed for agricultural applications. A stub or full axle with a drum brake attached to the hub, the backing plate which supports the brake shoes is welded to the axle. The brakes are operated by a cam lever (sometimes referred to as an S-Cam) which is mechanical and can be operated by cable, air or hydraulic cylinder. Hydraulic cylinder is most common as this can be operated by the tractor's hydraulics. Hydraulic cylinder to operate the brake is also available.

**Capacities:** 3t/axle to 30t/axle    **Max Speed:** 30 km/h  
**Brake Drum Sizes:** 250mm x 40mm to 406mm x 120mm

## STUB AXLES

These are manufactured using a round or square shaft (usually short) with hubs designed to suit your application. Hubs have high speed tapered roller bearings. Standard range is to European specifications however some specials can be manufactured. 1,600kgs capacity and above have triple lipped seals bolt on caps with grease nipples. Stub axles are usually used where an extra long axle is required by placing a beam between them.

**Capacities:** 500kg to 20,000kg  
**Shaft Size:** 39ø to 150ø | 40ø to 100ø

## STEERING STUB AXLES

A short stub or full length axle complete with hub, including a vertical shaft (known as a King Pin) which allows the hub to pivot. Used for changing direction (steering).

**Stub axles**    Available in 5 on 140 or 6 on 205

**Full Axles**    Available in 5 on 140, 6 on 205 or 8 on 275

**Self Steering**    Available in 10 on 335 PCD hubs

**Capacities:** 3 tonne to 7 tonne/PR

**Capacities:** Upto 7 tonne

**Capacities:** 20 tonne

**Length:** As required

**Length:** 3 metres

## 24, 30, 40 & 45 TONNE BALANCED SELF STEERING SUSPENSION

24, 30, 40 & the new 45 tonne self steering suspension. A wheel base of 2,000mm which will accommodate a range of wheel and tyre assemblies. The walking beam type suspension is ideal to distribute the load evenly, while the self-steering on the rear tyres offers great stability and maneuverability. Double action hydraulic cylinders are used to lock out for reversing, and the mounting channel is easily adapted to any chassis. Mechanical drum brakes can be added as an option.

**Features & Benefits:** Capacity of 24, 30, 40 & 45t at 25kph | Custom made | Superior quality reducing maintenance with higher safety | Walking beam distributes the load evenly | Mounting channel adapted to any chassis | Self steering for great maneuverability & tyre life | Double action cylinders lock during reversing | Increased service life & proven reliability.





**For many years, throughout the world and Australia, OTR products have become the first choice of leading OEMs (Original Equipment Manufacturers) for mining, agricultural, construction, infrastructure, forestry and industrial companies.**

OTR heavy duty parts and components are developed with one result in mind – to maximize the uptime of your work fleet. That's why we only supply the highest quality, innovative solutions tailored for your specific needs, and why we offer reduced manufacturing times compared to our competitors.

This is matched by OTR's comprehensive product support. Our Australia wide Service Centres, including our on-site capabilities, offer comprehensive on site inspections. All OTR maintenance, repair and replacement services are carried out by highly trained staff using the latest diagnostic tools.

Our work is guaranteed to meet the highest Australian standards and is backed by OTR's comprehensive global technical and logistical facilities. For added peace of mind, OTR offers an extensive warranty on parts and service. The bottom line is, by choosing OTR axles your vehicles will spend more time at work, less time in the workshop and be safer for your operators. At OTR we don't compromise, nor should you.

#### **MANUFACTURER & DISTRIBUTOR OF WORLD'S TOUGHEST AXLES**

Complete axle assemblies and spare parts range. Specialists in the agricultural market place, national supply of OEM's and aftermarket parts, experienced manufacturer and designer of quality controlled and endorsed products. Tailoring of product capabilities to suit any need.

#### **SUPPORT AUSTRALIAN MANUFACTURING & BUY AUSTRALIAN**

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The range of components described in this catalogue is broad but not exhaustive and mostly shows our standard or "off-the-shelf" items. Specifications may vary from time to time as products are improved or new additions are made to our line-up to better serve you, the customer.

To assist you gather price and technical data we've introduced "Fastrack Enquiry" pages. Just copy these and fax to us and we'll attend to your query promptly - mostly same day. Alternatively, call our technical department on **1300 CALL OTR**.

If you can't find the axle product you're looking for, chances are we can make it for you. Axles are our business from drawing board to prototype and finally to low or high volume production runs at the right price.

#### **OTR'S WORLD CLASS CUSTOMER SERVICE**

With a centralised OTR Customer Service Centre, and Wheel and Undercarriage Service Centres strategically positioned around Australia, OTR is able to provide a full product and technical support service. Our highly trained and knowledgeable staff and fully equipped Service Centres make testing, maintenance, service and part replacement quick and easy for fewer vehicle down time.

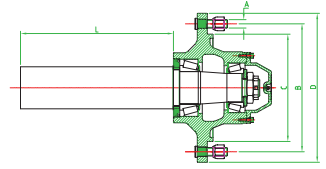
#### **THE BENEFITS OF CHOOSING OTR AXLES INCLUDE:**

- ✓ Manufactured in Australia to suit your performance priorities
- ✓ Capacity - 500kg to 20,000kg at 25kph
- ✓ Design flexibility - custom design and small runs
- ✓ Heavy duty design - increased service life and proven reliability
- ✓ Superior quality means reduced maintenance with higher safety margins
- ✓ Bolt on dust caps - superior protection against the Australian environment
- ✓ Triple lip seal - ensuring longer service life and easy maintenance

#### **OTR - TYRES WHEELS AXLES SERVICE CENTRES OFFER:**

- ✓ An extensive range of OTR Wheels, Rims, Axles and Tyres
- ✓ Tailoring of new components to suit individual needs
- ✓ Reduced manufacturing times compared to our competitors
- ✓ Repairs to OEM specifications
- ✓ Environmental accreditation
- ✓ Extensive Parts and Service Warranties on all products sold
- ✓ Quality controlled and endorsed products to Australian Standards - 4457.1 2007
- ✓ ISO 9001 - 2008

# STUB AXLE ASSEMBLIES

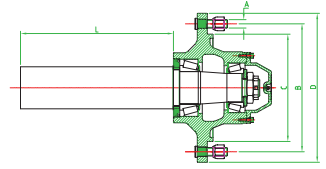


MODEL	CAPACITY OF STUB (KG) AT 25 KM/H	STUB MATERIAL (MM)		NUMBER OF STUDS	STUD SIZE	PCD (MM)	SPIGOT (MM)	FLANGE Ø (MM)	STUB SIZE (MM)	
		ROUND Ø	SQUARE (W)							
AH 20SF	500	39	40	5	1/2" UNF	114.30	60	140	143	
	500	39	N/A	5	1/2" UNF	114.30	60	140	193	
	500	39	40	5	7/16" UNF	107.95	60	140	143	
	500	39	40	4	1/2" UNF	101.60	60	140	143	
AH 20	500	39	40	5	1/2" UNF	114.30	60	150	143	
	500	39	N/A	5	1/2" UNF	114.30	60	150	193	
	500	39	40	5	1/2" UNF	120.65	60	150	143	
	500	39	40	5	1/2" UNF	120.65	60	150	193	
	500	39	N/A	4	1/2" UNF	100.00	60	150	143	
AH 20WF	500	39	40	6	1/2" UNF	100.00	60	190	143	
AH 20-HD	500	39	N/A	5	7/16" UNF	107.95	66	140	124	
	500	39	N/A	5	1/2" UNF	114.30	66	140	124	
AH 25	625	45	45	5	7/16" UNF	107.95	60	150	200	
	625	45	45	5	1/2" UNF	120.65	60	150	200	
	625	45	45	5	1/2" UNF	114.30	60	150	200	
AH 25WF	625	45	45	6	1/2" UNF	139.70	60	190	200	
AH 30	750	45	45	5	7/16" UNF	107.95	67	172	203	
	750	45	45	5	1/2" UNF	120.65	67	172	203	
	750	45	45	5	1/2" UNF	114.30	67	172	203	
	750	45	45	6	1/2" UNF	139.70	67	172	203	
AH 40	1,000	50	50	6	1/2" UNF	152.40	92	183	234	
	1,000	50	50	6	1/2" UNF	139.70	92	183	234	
	1,000	N/A	50	5	M14 x 1.5	150.00	92	183	234	
AH 50	1,600	56	N/A	6	1/2" UNF	152.40	93	191	272	
	1,600	N/A	63	6	9/16" UNF	152.40	93	191	272	
	1,600	56	63	6	1/2" UNF	139.70	93	191	272	
HD 50	1,800	-	50	6	M18 x 1.5	205	160	250	200	
HD 50	2,000	N/A	63	6	1/2" UNF	139.7	93	191	272	
60H-6	2,500	65	63	6	M18 x 1.5	205	160	250	300	
75H-6	3,500	75	N/A	6	M18 x 1.5	205	160	250	300	
75H-8	3,500	75	N/A	8	M18 x 1.5	275	220	320	300	
80-6	4,000	80	83	6	M18 x 1.5	205	160	250	353	
80-8	4,000	80	83	8	M18 x 1.5	275	220	320	353	
90H-8	5,500	N/A	90	8	M20 x 1.5	275	220	320	348	
90H-10	5,500	N/A	90	10	M22 x 1.5	335	280	381	348	
SH-100	6,000	N/A	100	5	M20 x 1.5	445	N/A	490	400	
92H-8	6,500	92	N/A	8	M20 x 1.5	275	220	320	348	
92H-10	6,500	92	N/A	10	M22 x 1.5	335	280	380	348	
100H-10	6,500	N/A	100	10	M22 x 1.5	335	280	380	400	
100H-10	9,000	110	N/A	10	M22 x 1.5	335	280	380	400	
110H-10	15,000	110	N/A	10	M22 x 1.5	335	280	390	400	
150H-12	20,000	150	N/A	12	M24 x 1.5	425	370	486	500	



WHEEL FITMENT		JOURNAL Ø (MM)		BEARING NUMBERS		SHIPPING WEIGHT (KG)		PART NUMBER	
		INNER	OUTER	INNER	OUTER	ROUND	SQUARE	ROUND	SQUARE
	Ford	31.75	19.05	67048/10	11949/10	4.34	4.51	033.207.010	033.209.010
	Ford	31.75	19.05	67048/10	11949/10	5.00	N/A	033.208.010	N/A
	HT Holden	31.75	19.05	67048/10	11949/10	4.27	4.63	033.199.010	033.201.010
	Mini	31.75	19.05	67048/10	11949/10	4.23	4.64	033.219.010	033.221.010
	Ford	31.75	19.05	67048/10	11949/10	4.62	4.99	033.211.010	033.213.010
	Ford	31.75	19.05	67048/10	11949/10	5.15	N/A	033.212.010	N/A
	HQ Holden	31.75	19.05	67048/10	11949/10	4.65	4.89	033.195.010	033.197.010
	HQ Holden	31.75	19.05	67048/10	11949/10	5.15	5.50	033.196.010	033.198.010
	Space Saver	31.75	19.05	67048/10	11949/10	4.36	N/A	033.699.010	N/A
	Toyota	31.75	19.05	67048/10	11949/10	5.84	6.24	033.215.010	033.217.010
	HT Holden	31.75	19.05	67048/10	11949/10	5.70	N/A	033.711.010	N/A
	Ford	31.75	19.05	67048/10	11949/10	5.75	N/A	033.746.010	N/A
	HT Holden	35	22	68149/10	12749/10	5.65	6.55	033.229.010	033.230.010
	HQ Holden	35	22	68149/10	12749/10	5.92	6.64	033.225.010	033.226.010
	Ford	35	22	68149/10	12749/10	5.97	6.60	033.228.010	033.227.010
	Toyota	35	22	68149/10	12749/10	7.34	7.88	033.232.010	033.231.010
	HT Holden	35	25	30207	30205	6.9	7.5	033.290.010	033.291.010
	HQ Holden	35	25	30207	30205	6.9	7.9	033.292.010	033.293.010
	Ford	35	25	30207	30205	6.9	7.9	033.294.010	033.295.010
	Toyota	35	25	30207	30205	7.4	7.9	033.298.010	033.299.010
	US Tractor	40	30	30208	30206	9.8	11.0	033.288.010	033.239.010
	Toyota	40	30	30208	30206	9.8	11.0	033.283.010	033.282.010
	Toyota	40	30	30208	30206	N/A	12.0	N/A	033.684.010
	US Tractor	45	30	30209	30206	13.3	N/A	033.275.010	033.274.010
	US Tractor	45	30	30209	30206	N/A	16.0	N/A	033.427.010
	Toyota	45	30	30209	30206	13.3	16.0	033.767.010	033.824.010
	Bedford (Din)	40	30	32209	32206	N/A	12	N/A	034.485.010
	Toyota	45	30	32209	32206	N/A	16	N/A	033.859.010
	Bedford (Din)	55	40	30211	30208	25	23	033.412.010	033.261.010
	Bedford (Din)	65	50	32213	32210	28	N/A	033.158.010	034.406.010
	Bedford (Din)	65	50	32213	32210	35	N/A	033.169.010	N/A
	Bedford (Din)	70	50	30214	30210	41	42	033.413.010	033.811.010
	Bedford (Din)	70	50	30214	30210	42	43	033.260.010	033.403.010
	Bedford (Din)	80	55	32216	30311	N/A	54	N/A	033.129.010
	European Truck (Din)	80	55	32216	30311	N/A	68	N/A	033.140.010
	Demountable Rim 20" - 22.5"	89.974	66.675	HM218248	HM212049	N/A	75	N/A	033.390.010
	Bedford (Din)	80	55	32216	30311	49	N/A	033.332.010	N/A
	European Truck (Din)	80	55	32216	30311	63	N/A	033.315.010	N/A
	European Truck (Din)	85	65	32217	32213	N/A	75	N/A	033.259.010
	European Truck (Din)	85	65	32217	32213	80	N/A	034.389.010	N/A
	European Truck (Din)	85	75	33217	33215	84	N/A	033.438.010	N/A
	Earthmover	120	105	30224	32021	185	N/A	033.258.010	N/A

# FAD STUB AXLE ASSEMBLIES & SPARES



MODEL	CAPACITY OF STUB (KG) AT 25 KM/H	STUB MATERIAL (MM)		NUMBER OF STUDS	STUD SIZE	PCD (MM)	SPIGOT (MM)	FLANGE Ø (MM)	STUB SIZE (MM)	
		ROUND Ø	SQUARE (W)							
50S-5	1,600	N/A	50	5	M16 x 1.5	140	93	175	200	
	1,600	N/A	50	5	M16 x 1.5	140	93	175	250	
60-6	2,500	N/A	60	6	M18 x 1.5	205	160	245	300	
70H-6	3,750	N/A	70	6	M18 x 1.5	205	160	245	300	
70H-8	3,750	N/A	70	8	M18 x 1.5	275	220	320	300	
80H-8	4,500	N/A	80	8	M18 x 1.5	275	220	320	350	
90H-8	5,500	N/A	90	8	M20 x 1.5	275	220	320	350	
90H-10	5,500	N/A	90	10	M22 x 1.5	335	280	380	350	
100-10	6,500	N/A	100	10	M22 x 1.5	335	280	380	400	

COMPLETE STUB ASSEMBLY	SERIES	STUD	NUT	INNER BEARINGS	OUTER BEARING	
TA00145	50-5	M16 x 1.5	M16 x 1.5	30209	30206	
PART NUMBER		FSP43	FSP33	920.000.767	920.000.792	
TA00150	60-6	M18 x 1.5	M18 x 1.5	30211	30208	
PART NUMBER		FSP44	FSP34	920.001.687	920.000.768	
TA00152	70H-6	M18 x 1.5	M18 x 1.5	32213	32210	
PART NUMBER		FSP44	FSP34	920.000.803	920.000.802	
TA00155	70H-8	M18 x 1.5	M18 x 1.5	32213	32210	
PART NUMBER		FSP44	FSP34	920.000.803	920.000.802	
TA00157	80H-8	M18 x 1.5	M18 x 1.5	32215	32211	
PART NUMBER		FSP44	FSP34	920.000.798	TA03869	
TA00161	90H-8	M20 x 1.5	M20 x 1.5	32216	32212	
PART NUMBER		FSP45	FSP35	920.000.799	N/A	
TA00158	90H-10	M22 x 1.5	M22 x 1.5	32216	32212	
PART NUMBER		FSP46	FSP36	920.000.799	N/A	
TA00142	100-10	M22 x 1.5	M22 x 1.5	32217	32213	
PART NUMBER		FSP46	FSP36	920.001.210	920.000.803	





## For Agricultural & Industrial trailer applications

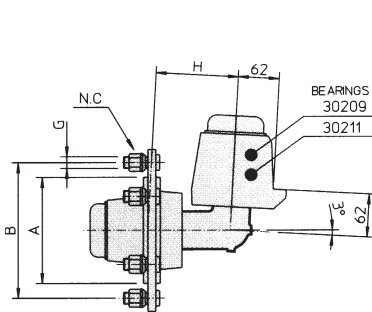
WHEEL FITMENT	JOURNAL Ø (MM)		BEARING NUMBERS		SHIPPING WEIGHT (KG)		PART NUMBER	
	INNER	OUTER	INNER	OUTER	ROUND	SQUARE	ROUND	SQUARE
Din Standard	45	30	30209	30206	N/A	10	N/A	TA00145
Din Standard	45	30	30209	30206	N/A	11	N/A	TA00145
Din Standard	55	40	30211	30208	N/A	16	N/A	TA00150
Din Standard	65	50	32213	32210	N/A	26	N/A	TA00152
Din Standard	65	50	32213	32210	N/A	33	N/A	TA00155
Din Standard	75	55	32215	32211	N/A	30	N/A	TA00157
Din Standard	80	60	32216	32212	N/A	45	N/A	TA00161
European Truck (Din)	80	60	32216	32212	N/A	52	N/A	TA00158
European Truck (Din)	85	65	32217	32213	N/A	67	N/A	TA00142

SEAL	SEAL RING	DUST CAP	AXEL NUT	SPLIT PIN	TAPERED WASHER
53 x 85 x 10	45.5 x 53 x 13	62mm	M27 x 2	35mm	N/A
FSP74	033.255.010	FSPDC62	FSP21 A	N/A	N/A
70 x 100 x 10	55.5 x 70 x 13	80mm	M33 x 2	45mm	N/A
FSP76	FSP68	FSPDC80	FSP22	N/A	N/A
80 x 120 x 12	67 x 80 x 13	90mm	M42 x 2	55mm	N/A
FSP77	FSP63	FSPDC90	FSP24	N/A	N/A
80 x 120 x 12	67 x 80 x 13	90mm	M42 x 2	55mm	N/A
FSP77	FSP63	FSPDC90	FSP24	N/A	N/A
90 x 130 x 12	77 x 90 x 13	100mm	M45 x 2	75mm	N/A
FSP86	FSP67	FSPDC100	FSP25	N/A	N/A
100 x 140 x 12	100 x 82 x 15	110mm	M45 x 2	75mm	M20
FSP80	FSP64	FSPDC110	FSP25	N/A	FSP54
100 x 140 x 12	100 x 82 x 15	110mm	M45 x 2	75mm	M22
FSP80	FSP64	FSPDC110	FSP25	N/A	FSP55
110 x 150 x 12	87 x 100 x 16	120mm	M45 x 2	75mm	M22
FSP81	033.963.010	FSPDC120	FSP25	N/A	FSP55

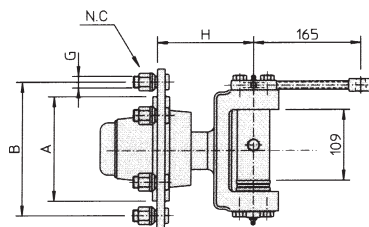


# STUB AXLES

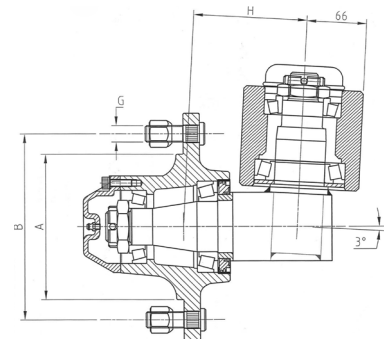
PART NUMBER	TYPE	CARRYING CAPACITY (KG)		NC NO. OF STUDS	G NUTS	A SPIGOT	B PCD	H LENGTH
		25 KM/H	40 KM/H					
WBV023	2	1,500	1,300	5	M16 x 1.5	93	140	140
WBV022	2	1,800	1,600	6	M18 x 1.5	160	205	125
TA00473	2	2,000	1,800	6	M18 x 1.5	160	205	125
TA00475	3	1,500	1,300	5	M16 x 1.5	93	140	140
TA00474	3	1,500	1,300	6	M18 x 1.5	160	205	140
034.421.010	2	2,500	2,000	6	M18 x 1.5	160	205	135



2



3

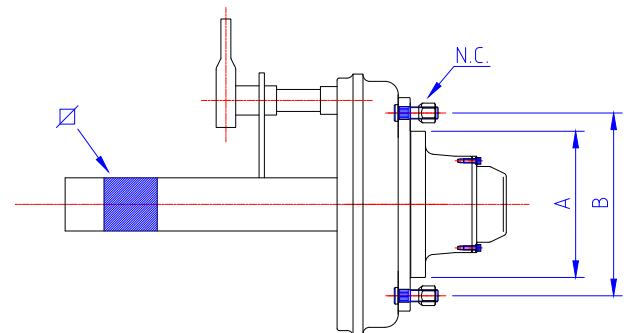


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## FITTED WITH MECHANICAL DRUM BRAKES

Capacity is rated at 25km/h. The below stub axles and brake assemblies are designed for agricultural applications.

**\*High speed 60km/h**

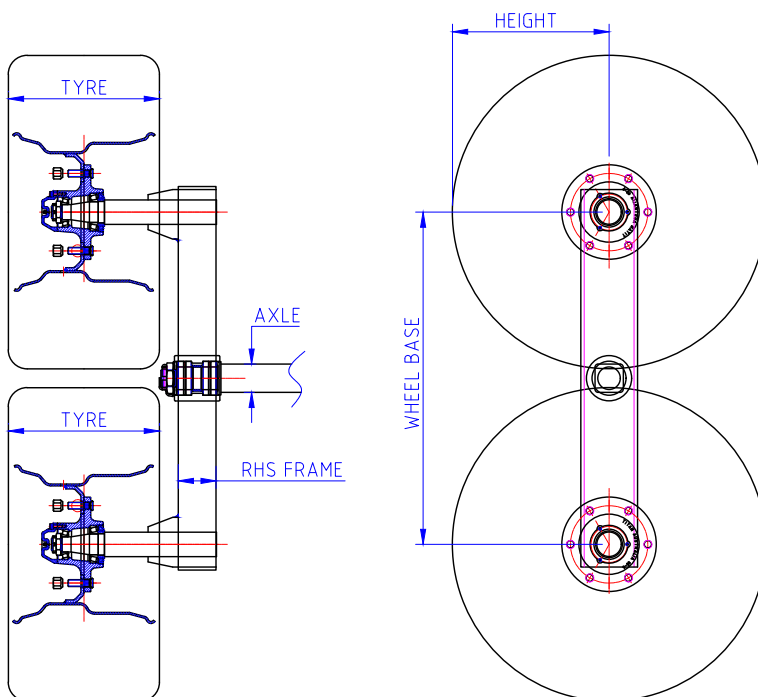


PART NUMBER	CAPACITY EACH (KG)	MATERIAL SQUARE (MM)	NC NO. OF STUDS	A SPIGOT	B PCD	BRAKE DIAMETER	BRAKE WIDTH (MM)
TA00213*	3,500*	70	6 x 18mm	160	205	300G	60
TA00210	4,500	80	8 x 18mm	220	275	350G	60
TA00211	5,500	90	8 x 20mm	220	275	400G	80
TA00209	5,500	90	10 x 22mm	280	335	400G	80
TA00208	6,500	100	10 x 22mm	280	335	400G	80
TA00523	7,500	100	10 x 22mm	280	335	406G	120
TA00524	7,500	100	10 x 22mm	280	335	406G	120
TA05116	7,500	130 x 14 SHS	10 x 22mm	280	335	400G	120



# WALKING BEAM AXLE ASSEMBLIES

PART NUMBER	CARRYING CAPACITY
139.686.010	3 Tonne
139.690.010	3 Tonne
139.711.010	6 - 7 Tonne
139.717.010	6 - 7 Tonne
139.309.010	8 Tonne
139.948.010	10 - 12 Tonne



## HEAVY LOADS, LOW SPEED ON UNEVEN TERRAIN

For use in agricultural/mining and forestry operations, or wherever heavy loads are required to be moved at low speed over uneven terrain. Walking beam assemblies can be manufactured in our factory to suit your application. Check technical department for sizes.

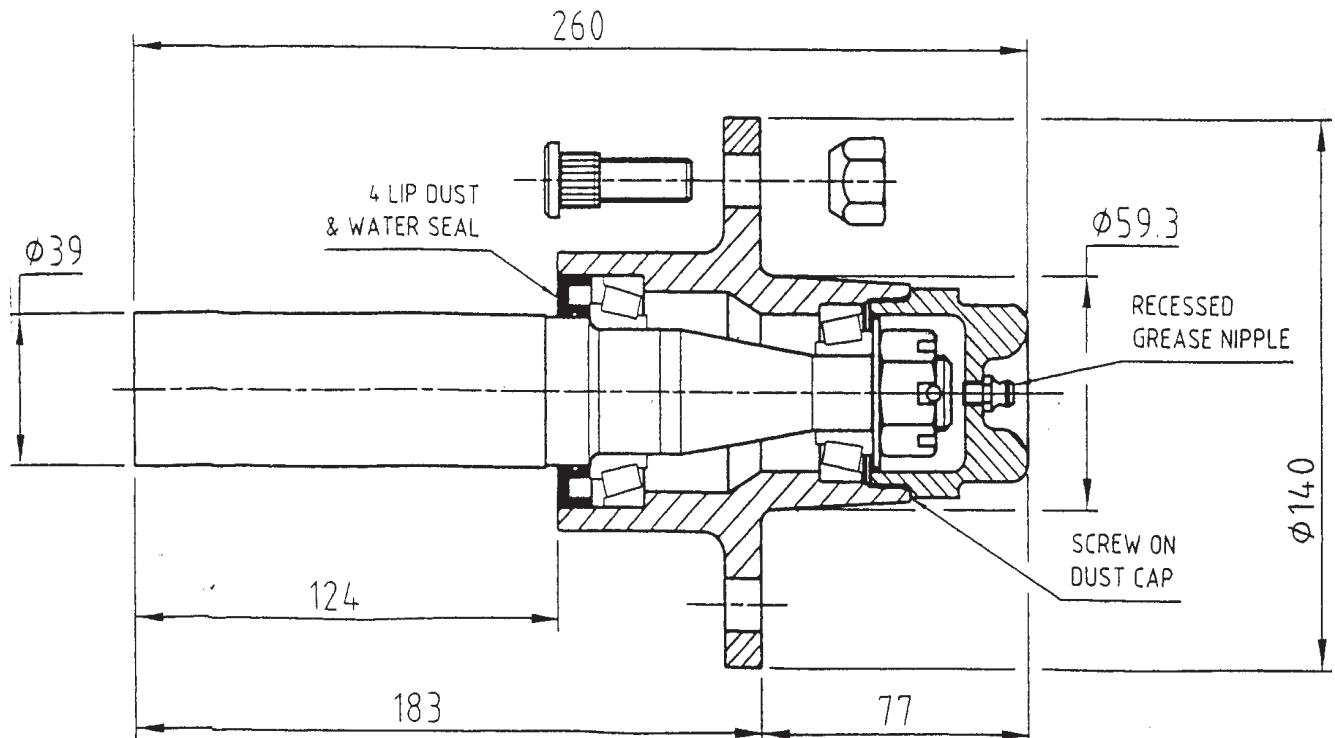
Ten tonne versions are typically fitted with:

- 11"x 19" 3 piece wheel (8 stud)
- 42"x 16"x 19" aircraft tyre for strength and resistance to puncture

**Various tyre & wheel combinations are available.**



# 500KG STUB AXLES



SPECIFICATIONS	
Part Numbers	033.711.010   033.746.010 (unassembled)
Model	AH20-HD
Capacity Each (Off-Road)	500kg at 40km/h
Capacity Each (On-Road)	500kg at 100km/h
Axle	39mm Round K1045
Hub	ASTM 65 - 45 - 12 Casting
Dust Cap (Screw-On With Grease Nipple)	180 Grey Iron
Bearings	Inner 67048/10 Journal 1.25"   Outer 11949/10 Journal 0.75"
Seal (Off-Road)	4 Lips
Seal (On-Road)	2 Lips
Stud Patterns	HT Holden 5 on 41/4" PCD   Ford 5 on 41/2" PCD

- Designed for the most arduous Australian agricultural conditions
- Reduced downtime
- Reduced servicing costs
- Increased reliability
- Heavy duty cast iron screw-on dust caps with grease nipple and 4-lip seal provide an effective dust/water barrier
- Eliminate bearing failure caused by lost press in dust caps or failed light duty seals
- Specifications subject to change without notice

# SIDRA SUSPENSIONS

**Dynamic Stability:** The FAD ASSALI SIDRA® system is designed with the advantage of improved trailer handling characteristics, resulting in a unique driving experience, regardless of whether you are moving on or off-road. Thanks to the independent, interconnected set of hydraulic cylinders, the system is able to adapt instantaneously to the unevenness of the ground the vehicle is traveling on to.

**Reduced Fuel Consumption:** The limited amount of stresses transmitted to the tractor through the coupling allow for a smoother movement of the whole vehicle in the field. Less power is required from the tractor engine resulting in a reduced fuel consumption rate and a better driving feel. Ease of installation: one of the additional benefits of the system lies in its ease of installation. Just a few bolts are needed for the fixing onto the machine frame, ensuring a time- and cost-saving assembly process

onto the final vehicle. Alternatively, the system can be easily welded into place.

**Maximum Flexibility:** All SIDRA® modules are equipped with either fixed or steering stub-axles and self - or forced steering systems, which can be easily combined for a single, tandem or tridem axle configuration trailer. Also available upon request are different track widths, which can be varied on demand according to the type of application and tyre used, and customised versions for special trailers.

**Storage:** Modules are palletized vertically so to occupy the least space possible, advantage both for transport and for storage by the customer.

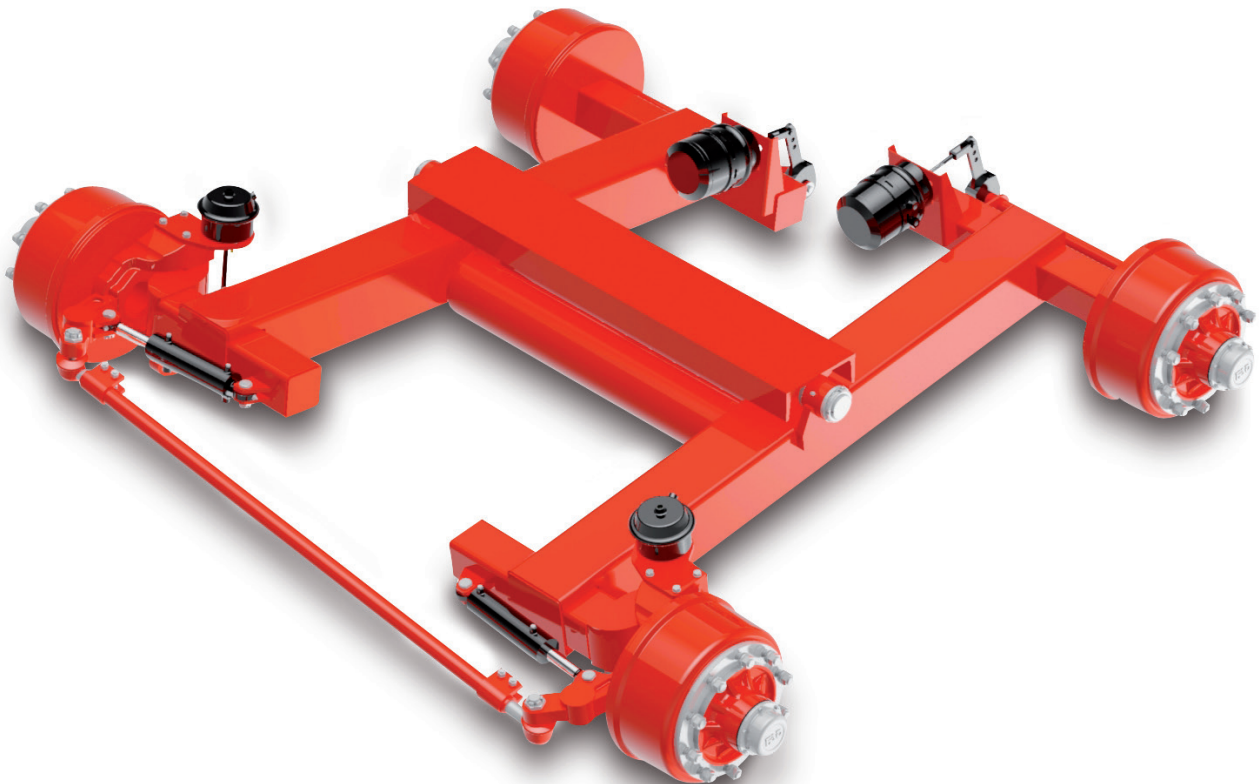
## A COMPLETE SUSPENSION SYSTEM

Consisting of a self-loading structure, braked stub-axles and hydraulic circuit. Available for load carrying capacities up to 14,000kg/module.

- Braked steel hubs stub axles homologated according to the EEC 71/320 regulation up to 105km/h
- Front axle lifting kit
- Additional accessories available upon request:
- Steering reverse motion locking system
- ABS and RDS options
- Nitrogen accumulators
- Locking valves

## WALKING BEAM TAG TANDEM AGGREGATE BALANCERS

Available with 4 stub axles: 2 Fixed and 2 Self-Steering stub axles or 2 forced steering stub axles. Also available without brakes. Also available with different carrying capacities from those shown.





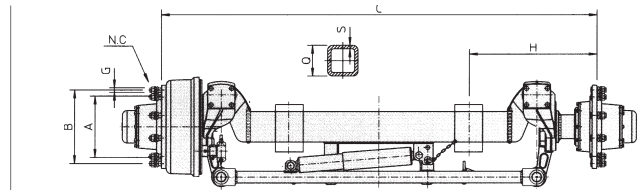
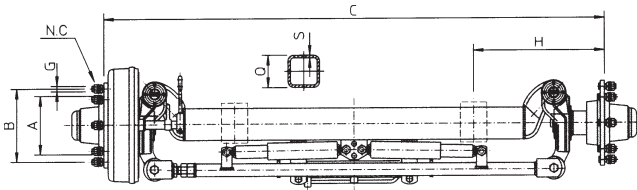
# STEERING AXLES

## WITH & WITHOUT BRAKES

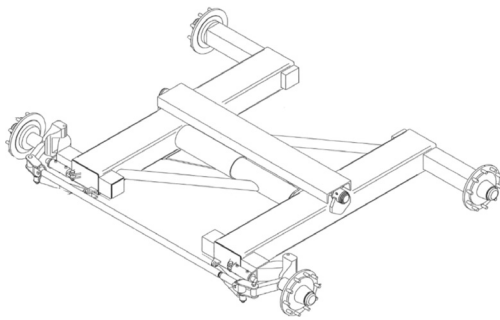
**Capacity:** 5,500 - 18,000kg

**Speed:** Up to 80km/h

**Available:** On order for OEM users



## SELF STEERING SUSPENSION



**TA01522** - 24 tonne | **139.831.010** - 30 tonne  
**139.752.010** - 40 tonne | **140.007.010** - 45 tonne



- OTR - Tyres Wheels Axles 24, 30, 40 and 45 tonne balanced self-steering suspension
- A wheel base of 2000mm which will accommodate 30.5 x 32 tyres
- Self-steering on the rear tyres offers great stability
- The walking beam type suspension is ideal to distribute the load evenly
- Double action hydraulic cylinders are used to lock out for reversing
- The mounting channel is easily adapted to any chassis
- Mechanical drum brakes can be added as an option
- For more details please contact OTR's customer service centre on **1300 CALL OTR**

# BALL COUPLINGS

## HEAVY DUTY AUTO LOCK

AUTO-LOCK couplings lock automatically when ball enters coupling jaws. All couplings come with a manual pin lock, which must be engaged prior to moving vehicle. If you are using a ball coupling for towing on Australian roads, it must be A.D.R. approved. OTR type SM300 and GP300 have been fully tested and certified by a Government approved testing authority. Couplings should be supplied with OTR tested steel balls - don't use substitutes. Non-original balls will void ADR62/02 approval.

### ON-ROAD COUPLINGS

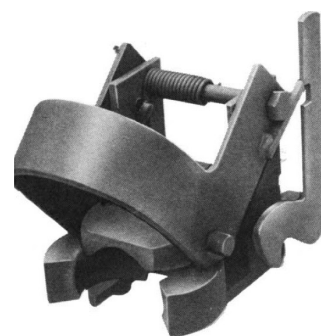
- 3 inch (76.2mm) ball couplings
- 2 types
- Use for on or off-road applications
- Approved and tested to ADR62/02
- Fully tested
- For full safety, use manual pin lock
- Only complies with ADR's when used with OTR's approved matching steel balls



139.334.010



GP-300AE



SM300AE

PART NUMBER	MODEL	WEIGHT (KG)	CAPACITY (KG)	TO SUIT
139.334.110	SM300AE	8.2	10,000	76.2mm Ball
139.334.120	GP-300AE	9.2	10,000	76.2mm Ball

### OFF-ROAD COUPLINGS

- 58.737mm (2 5/16")
- Approved coupling for off-road agricultural and industrial uses
- All steel, heavy duty coupling
- Back tractor into implement & coupling closes automatically
- Well proven
- For full safety, use manual pin lock



139.592.010



FB2516AE

PART NUMBER	MODEL	WEIGHT (KG)	CAPACITY (KG)	TO SUIT
139.592.050	FB-2516AE	8.2	6,000	58.737mm Ball



# OTR AXLES, STUB AXLES & WHEELS

## AXLE FEATURES & BENEFITS

### **SUPERIOR HEAVY DUTY AUSTRALIAN:**

With increased service life, Designed to suit Australian climate and work environment and the ability to survive the harsh Australian farming/mining environment coupled with proven reliability.

### **HIGH QUALITY MATERIAL:**

High quality product with long service life.

### **LARGE RANGE:**

OTR provides design flexibility with a wide range of choice from 250kg to 40,000kg, the largest range in Australia and a full range of spare parts available.

### **FLEXIBLE PRODUCTION:**

Allows for small runs of custom designs for OEM's to increased options and paired with prompt delivery.

### **BOLT ON CAST DUST CAPS:**

Superior strength and protection against the harsh Australian environment.

### **TRIPLE LIP SEAL & WEARING RINGS:**

60 - 150 series provides superior protection against the harsh Australian environment with longer service life and easy servicing for extended hub life.

### **COMPETITIVE PRICING:**

Excellent value for money with lower production costs.

## WHEEL FEATURES & BENEFITS

### **WORLDS LARGEST RANGE AVAILABLE:**

4" - 63" diameter wheels available and servicing all the agricultural, industrial and mining industries.

### **LARGE RANGE OF OFF SHELF DESIGN:**

Off the shelf designs provide for quick delivery and lower prices by offering a standard range of wheels.

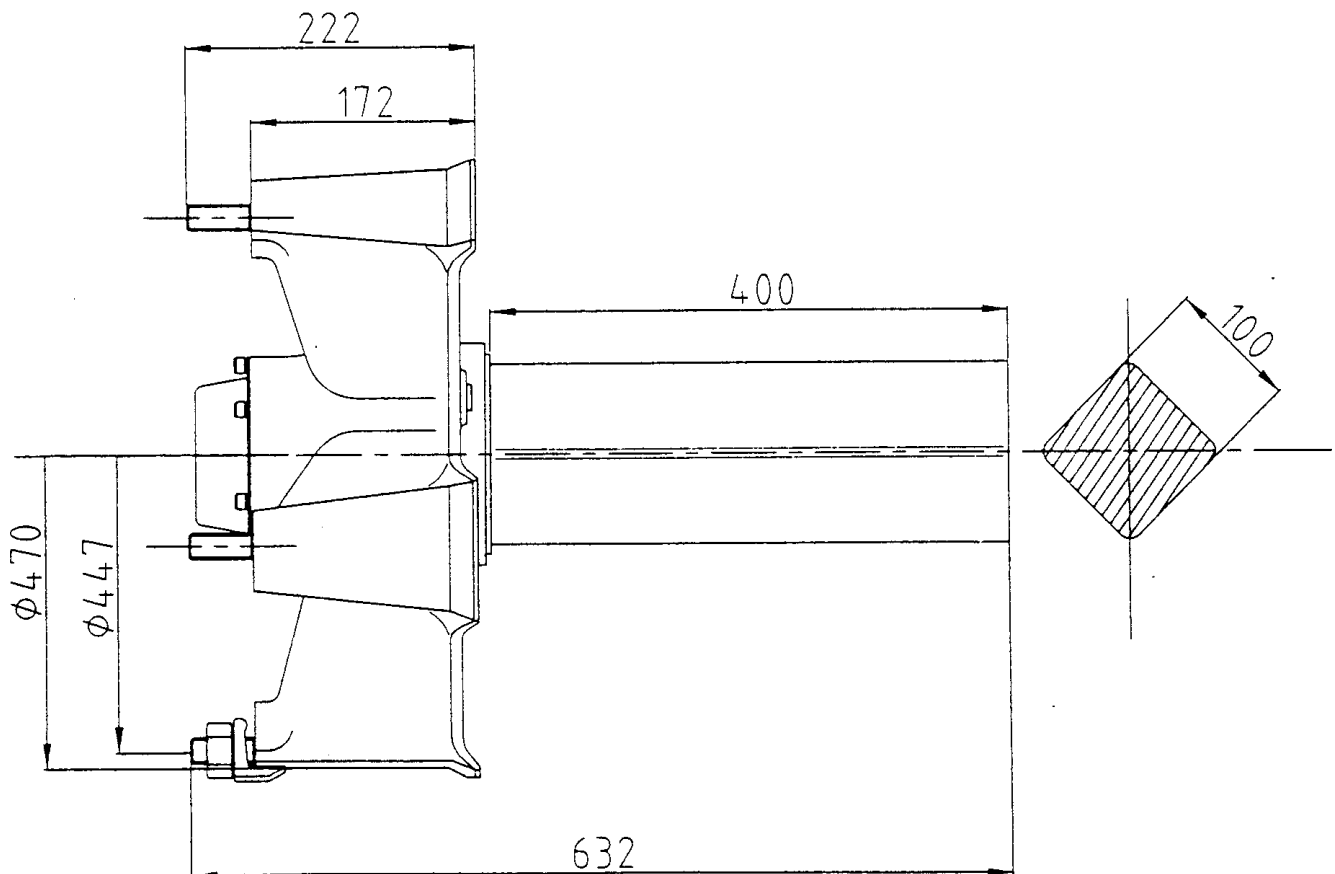
### **FACILITIES WORLDWIDE:**

Extensive manufacturing and testing facilities worldwide allow for an infinite range of standard and custom made designs. With quality product backed by vast technical support, OTR produce purpose designed wheels that give optimum strength and working life.

### **HIGH QUALITY MATERIALS:**

Including heavy duty pressed centres containing high quality and high strength with safety, long service life, reduced down time and better reliability.





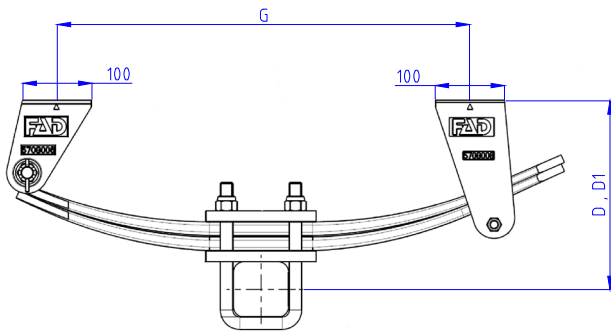
SPECIFICATIONS	
Part Numbers	033.390.010
Model	SH 100
Capacity Each (Off-Road)	6 tonnes
Capacity Each (On-Road)	Not For On-Road Use
Axle	100mm Square S1045
Bearings	Inner HM218248/HM218210   Outer HM212049/HM212010
Weight	75kg
Application	Trailers

- To suit 20"/22.5" demountable rims
- Available as weld-in stub assemblies or full-width axles
- Standard axle complete with studs, nuts and clamps

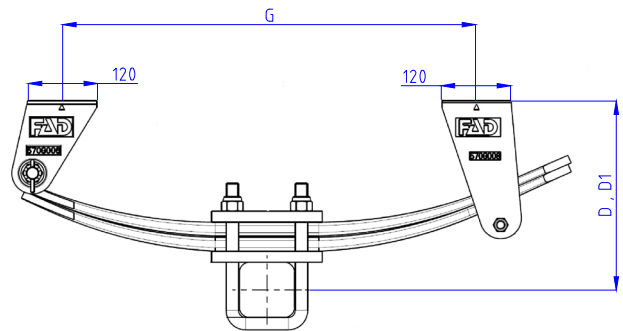
# SINGLE & TANDEM SPRING SETS

## SINGLE SPRING

PART NUMBER	IMAGE	CAPACITY (KG)	D	D1	G	AXEL (MM)
TA04081	1	7,000	274	253	600	80
TA03946	2	10,000	353	326	870	90



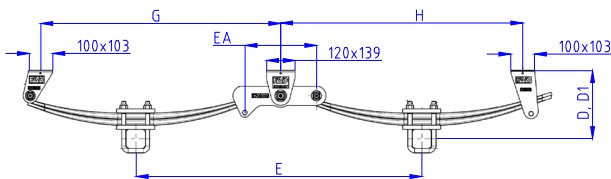
1 - 80mm Wide



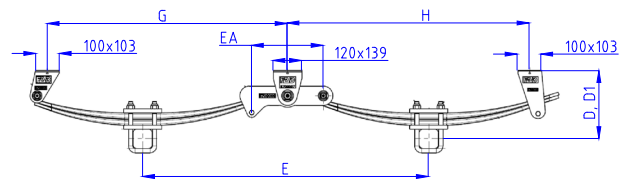
2 - 90mm Wide

## TANDEM SPRING

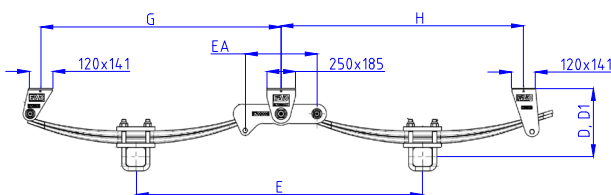
PART NUMBER	IMAGE	CAPACITY (KG)	E	D UNLOADED	D LOADED	G	H	AXEL	EA
TA04082	1	12,000	1,200	284	257	1,007	1,015	80	300
TA04083	2	16,000	1,350	289	253	1,077	1,085	90	460
TA04084	3	21,000	1,480	353	327	1,152	1,165	100	550
TA05739	4	20,000	1,525	397	350	1,277		100	489



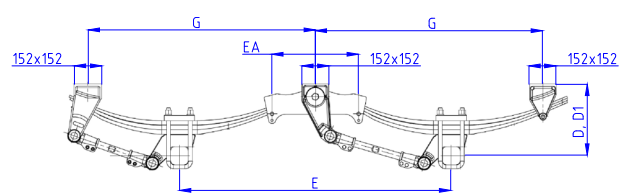
1 - 80mm Wide



2 - 90mm Wide



3 - 100mm Wide



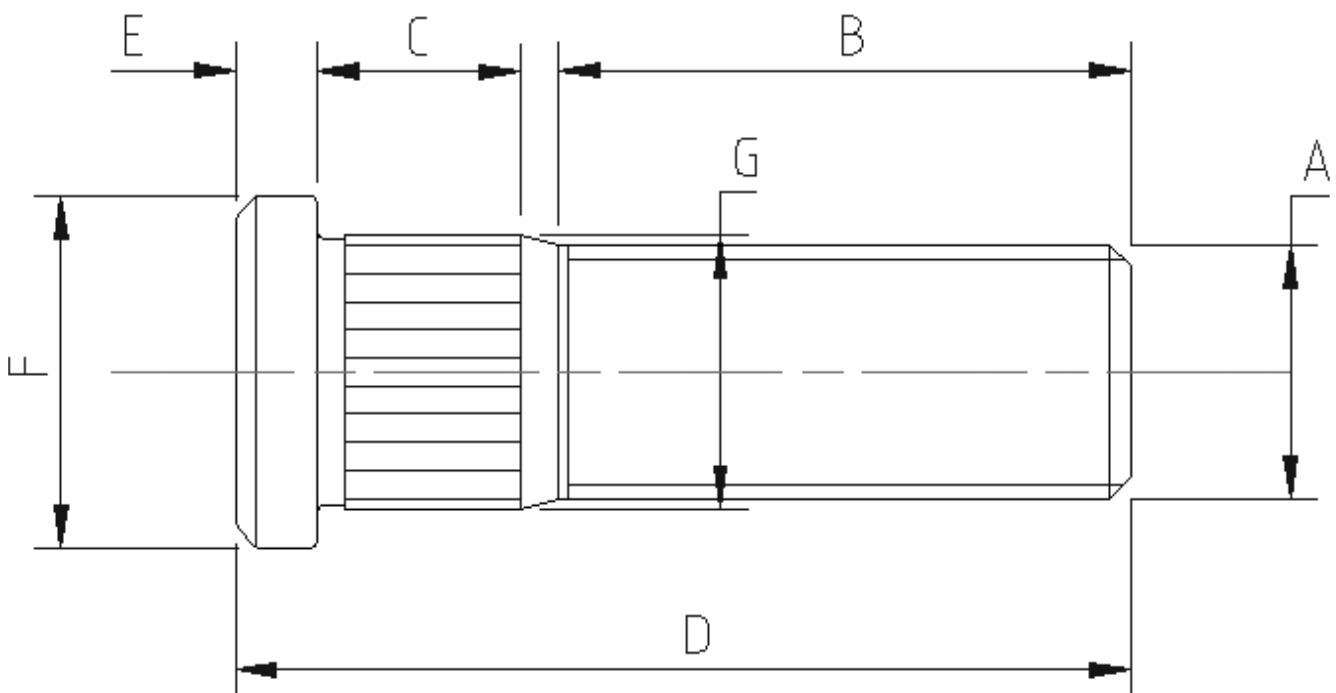
4 - 100mm Wide

## METRIC

PART NUMBER	A THREAD	B THREAD LENGTH	C KNURL LENGTH	D TOTAL LENGTH	E HEAD THICKNESS	F HEAD Ø	G KNURL Ø
170.049.010	M10 x 1.5	16	3	23.5	3.5	17	10.7
920.001.888	M14 x 1.5	37	16	59	6	25.7	14
170.075.010	M16 x 1.5	33	9	50	5	22	17.4
170.056.010	M18 x 1.5	42	15	65	5.5	25	19.5
170.051.010	M20 x 1.5	47	16	73	6	27	21.6
170.052.010	M22 x 1.5	54	21	85	6	30	24.4

## UNF

PART NUMBER	A THREAD	B THREAD LENGTH	C KNURL LENGTH	D TOTAL LENGTH	E HEAD THICKNESS	F HEAD Ø	G KNURL Ø
170.042.010 HT	7/16" UNF	25	12	43.5	4.5	19.25	14
170.053.010 FORD	1/2" UNF	33	12	50	4.5	19.25	14
170.043.010	9/16" UNF	32	10	51	6.5	22.2	18.4
170.015.010	5/8" UNF	39	12	59	6	25.4	18.1
170.024.010	5/8" UNF	48	12	66	6.5	25.4	18.1
170.037.010	3/4" UNF	45	16	77	6.5	32	20.8
170.014.010	7/8" UNF	43	24	78	8	32	23.6

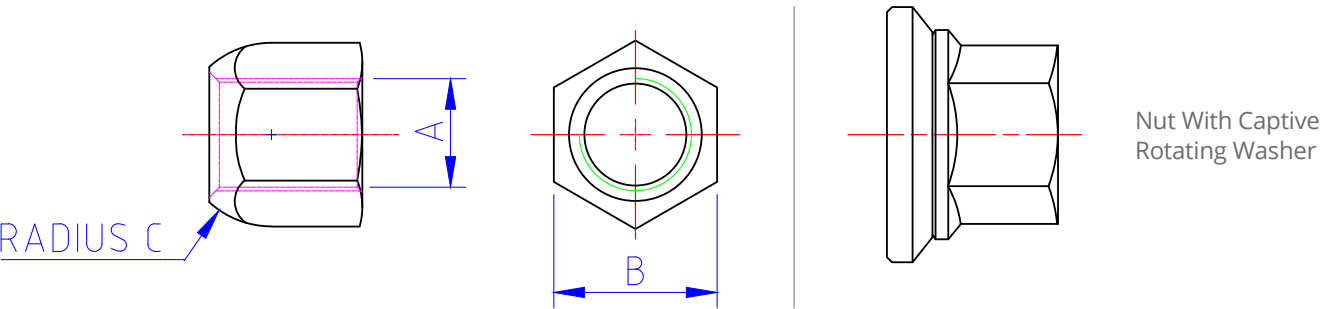




# WHEEL NUTS

## METRIC

PART NUMBER	A THREAD	B WIDTH A/F	C CHAMFER
920.001.889	M14 x 1.5	18.8	R14 Spherical
170.076.010	M16 x 1.5	27	R14 Spherical
170.057.010	M18 x 1.5	33	R16 Spherical
170.071.010	M20 x 1.5	32	R18 Spherical
170.070.010	M22 x 1.5	32	R18 Spherical
170.072.010	M24 x 2.0	35	90° Tapered
170.048.010	M12 x 1.5		
170.154.010	M22 x 1.5	32.8	Captive Flat Washer
170.155.010	M24 x 2.0	33.5	Captive Flat Washer
170.166.010	M27 x 2.0	41	Captive Flat Washer



## UNF

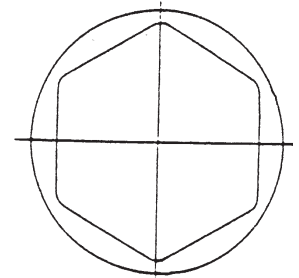
PART NUMBER	A THREAD	B WIDTH A/F	C CHAMFER
170.041.010	7/16" UNF	3/4"	60° Tapered
170.044.010	1/2" UNF	1 3/16"	60° Tapered
170.045.010	9/16" UNF	1 1/16"	90° Tapered
170.040.010	5/8" UNF	1 5/16"	90° Tapered
170.013.020	3/4" UNF	1 5/16"	90° Tapered
170.039.010	7/8" UNF	1 5/16"	90° Tapered



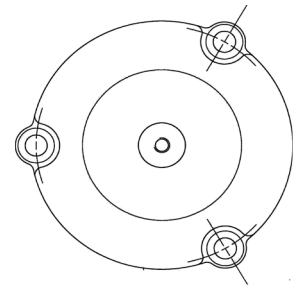
# GREASE & DUST CAPS

## TO FIT OTR AXLE & STUB AXLE

PART NUMBER	SERIES	A CAP SIZE
920.001.354	H20 & H25 (Holden)	1.78"
920.001.070	H30	2 1/16"
920.001.849	Non STD	2 1/4"
920.001.121	H40 & OLD H50	2 1/2"
033.711.050	H20 HD Series	
033.767.060	50H/HD50 (3 Screws)	
033.261.050	60H (3 Screws)	
033.131.040	75H (3 Screws)	
033.260.050	80.8 (3 Screws)	
033.175.070	90H/92H (3 Screws)	
033.259.050	100H (4 Screws)	
033.438.060	110H (6 Screws)	
033.258.050	150H (6 Screws)	
920.001.775	SH100 (6 Screws) Pressed Metal	



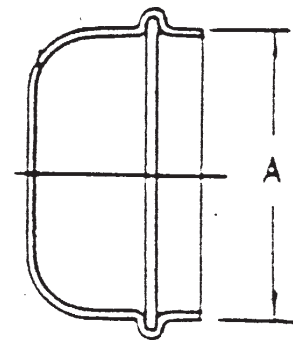
Cast Iron



Cast Iron

## METRIC SIZES TO SUIT FAD HUBS

PART NUMBER	A CAP SIZE (MM)
920.001.839	62
FSPDC 62	62
FSPDC 80	80
FSPDC 85	85
FSPDC 90	90
FSPDC 100	100
FSPDC 110	110
FSPDC 120	120



Pressed Steel Type



# FAD WHEEL STUDS & NUTS

## METRIC STUD

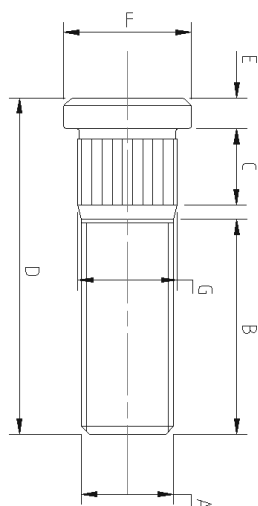
PART NUMBER	A THREAD	B THREAD LENGTH	C KNURL LENGTH	D TOTAL LENGTH	E HEAD THICKNESS	F HEAD Ø	G KNURL Ø
FSP43	M16 x 1.5	33	8	50	5	22	17.3
FSP44	M18 x 1.5	35	11	55	6	24	19.6
FSP44L	M18 x 1.5	45	12	65	6	24	19.6
FSP45	M20 x 1.5	48	12	68	6	25	21.6
FSP46	M22 x 1.5	47	14	71	6	27	24.3
FSP46L	M22 x 1.5	59	14	96	6	30	24.4

## METRIC NUT

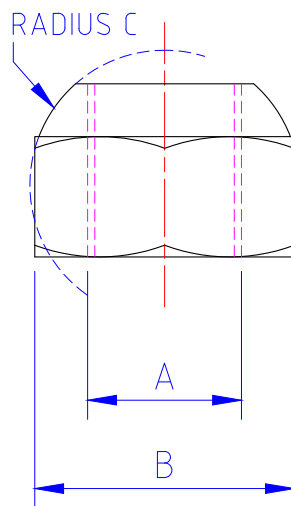
PART NUMBER	A THREAD	B WIDTH A/F	C CHAMFER
FSP33	M16 x 1.5	27	R14 Spherical
FSP34	M18 x 1.5	24	R16 Spherical
FSP35*	M20 x 1.5	27	
FSP36*	M22 x 1.5	30	

## SPHERICAL WASHER

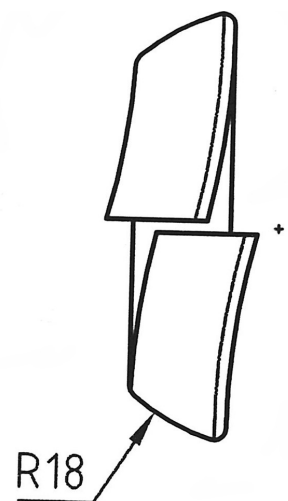
PART NUMBER	DESCRIPTION
FSP54	Suits 20mm Stud
FSP55	Suits 22mm Stud



Stud



Nut \*Supplied With Washers



Spherical Washer



# DOUBLE SIDED HUB ASSEMBLIES

## DS 08 DOUBLE SIDED

### CAST HUB

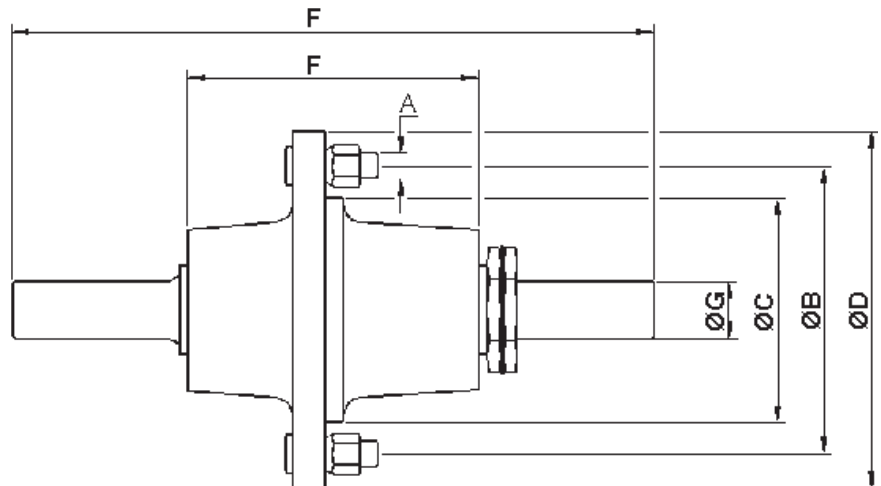
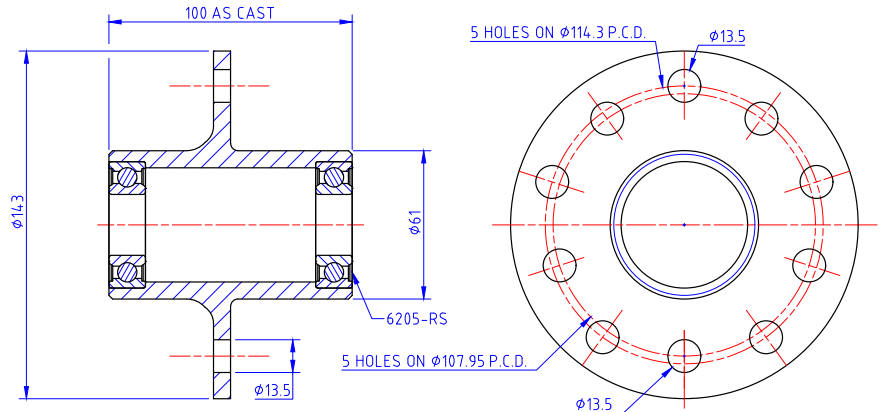
#### PART NUMBER 033.737.010

Lightweight hub suitable for turf and garden care machinery such as mowers, trolleys, trailing wheels etc.

Stud patterns available include Ford and HT Holden. Hubs are designed to fit a 25mm axle that protrudes and can be supported on both sides of the hub. 2 Deep Groove ball bearings (6205-2RS) are used in the design.

Axles, studs and nuts are supplied as an option. The DS08 series is an economical alternative to other axle designs and is versatile in terms of application.

**Note:** A similar hub design (LCO Series) is also available in steel (weldable) versions. These are suitable for applications where hubs are mounted by welding directly to shafts etc. No bearings are supplied.



## DS SERIES AXLE ASSEMBLIES

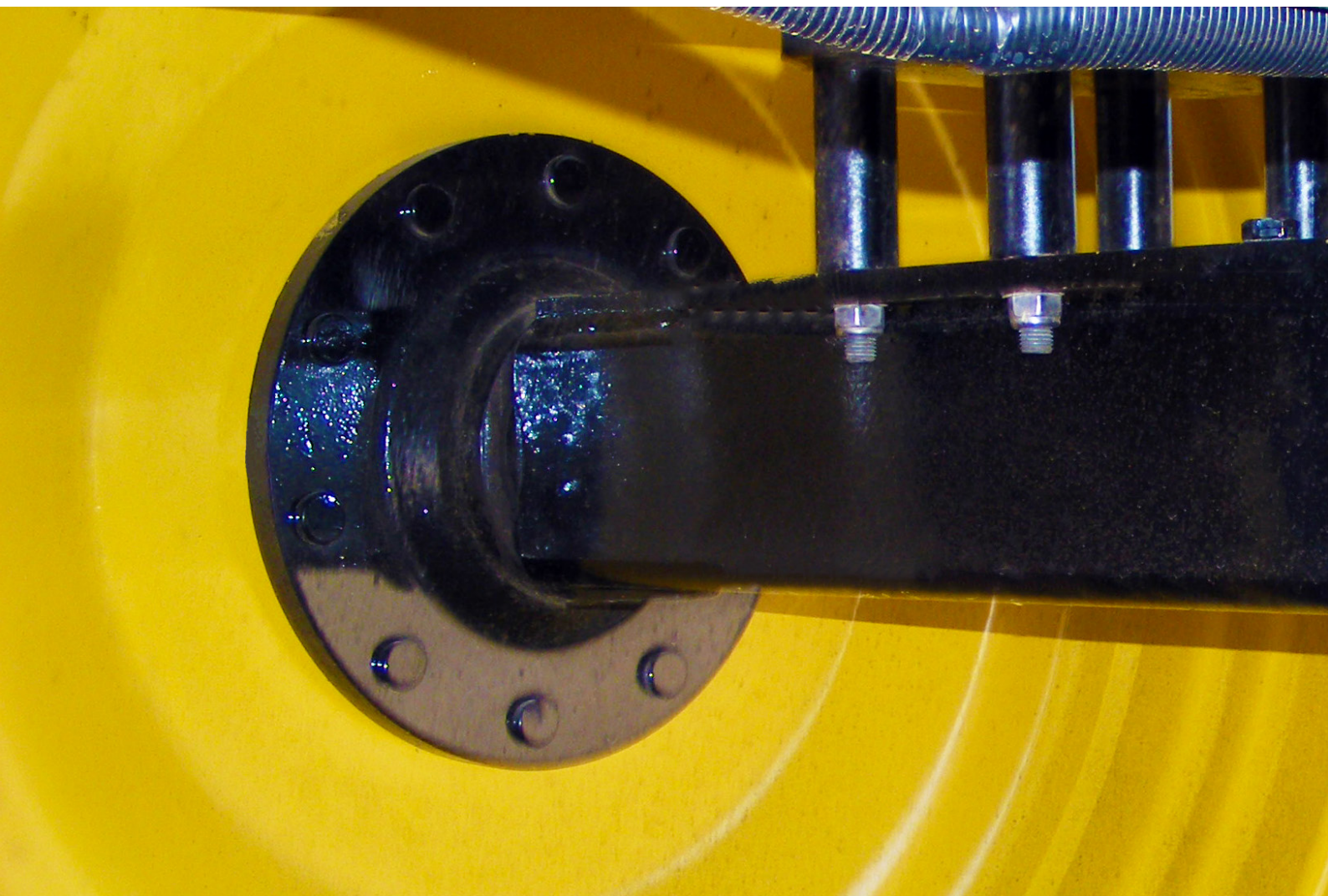
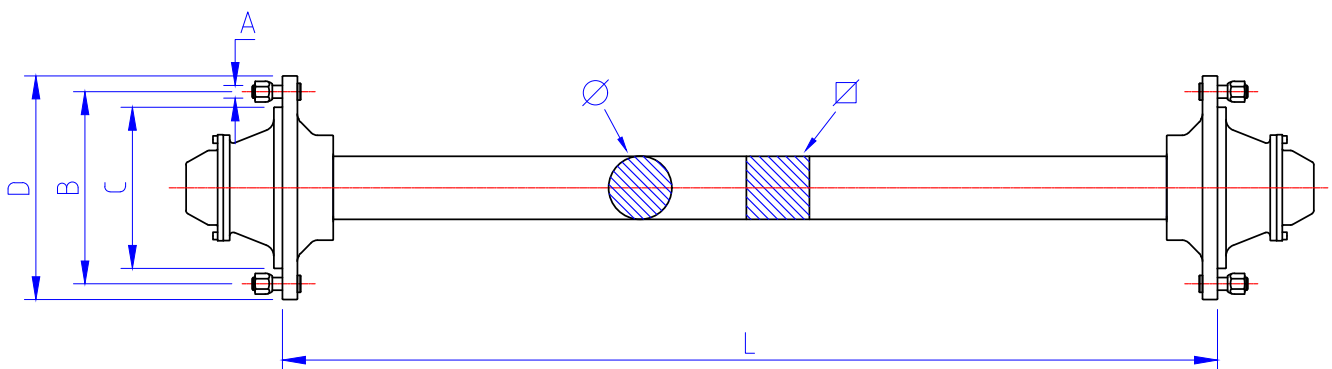
PART NUMBER	MODEL	CAPACITY (KG)	NUMBER OF STUDS	STUD SIZE	PCD	SPIGOT Ø	FLANGE Ø	SPIGOT	AXLE	AXLE Ø
033.251.010	DS20	500	4	7/16" UNF	120.65	87.3	177.80	146	227	28.575
033.348.010	DS20	500	6	1/2" UNF	139.7	87.3	177.80	146	406.4	28.575
034.224.010	DS25	500	5	1/2" UNF	4 1/4"	107.95	150	82	113	18
033.289.010	DS40	1,000	5	M16 x 1.5	140	93	187.50	190.5	446	34.925
033.437.010	DS40	1,000	6	1/2" UNF	139.7	93	187.50	190.5	446	34.925
033.011.010	DS80	2,000	6	M18 x 1.5	205	160	254	207.3	457.2	41.28
033.408.010	DS80	2,000	6	M18 x 1.5	205	160	254	207.3	457.2	41.28
034.196.010	DS75	2,000	6	M18 x 1.5	205	160	254		476	50
034.170.010	DS90	4,000	8	M20 x 1.5	275	221	250	149	476	50
034.124.010	DS110	7,000	10	M22 x 1.5	335	280	387	208	660	70

# OFF ROAD ONLY FULL LENGTH AXLES

## MADE TO ORDER - FOR AGRICULTURAL & INDUSTRIAL TRAILER APPLICATIONS

Choose from any of the stub axle sizes specified on page 66 of this catalogue to suit your full-length axle. Axles can be made from round or square material as required. **Note:** When choosing full-length axles for tandem/multi-axle applications, allow for a 20% decrease in load carrying capability. This allows for the increased loads caused by uneven terrain and turning.

**This is a guide only. Consult your designing engineer for more detailed loadings.**



# WHEEL & AXLE FITMENT GUIDE

Manufacturers and distributors of Wheels & Rims for agricultural, industrial & mining machinery Axles, Stub Axles, Trailer components for on-road & off-road applications OTR has a large range of off-the-shelf wheels in-stock, suitable for our axles. However, special jobs require special wheels. OTR will design and build customised wheels for your requirements. Our huge range of rims and centre discs can be coupled together to suit your special application. Our facilities include CAD-CAM design stations. Over 30,000 rims in stock. Up to 3,000 tonne presses to form heavy duty centre discs. Large CNC machining and drilling machines ensure absolute accuracy. Robotic welding provides the ideal connection of centre disc to the rim. Crack testing and run out testing guarantee the quality and integrity of your wheels. OTR produce customised wheels for bus, truck, tractor, earthmoving and mining equipment, trailers, semi-trailers and agricultural implements. The above are standard sizes. There are many other sizes and fitments available. Please contact our technical department for more information on 1300 CALL OTR.

WHEEL FITMENT	NUMBER OF STUDS	STUD DIAMETER	PCD	SUITABLE
Mini	4	1/2"	4.0"	AH 20
Holden HT	5	7/16"	4.25"	AH 20/25/30
Ford	5	1/2"	4.5"	AH 20/25/30
Holden HQ	5	1/2"	4.75"	AH 20/25/30
Commodore	5	1/2"	120mm	AH 20/25/30
Ford F100	5	5/8"	5.5"	AH 20/25/30/40/50
Suzuki	5	5/8"	5.5"	AH 20/25/30/40/50
Europe Agriculture	5	16mm	140mm	AH 20/25/30/40/50
Toyota	6	1/2"	5.5"	AH 20/25/30/40/50
Jeep	5	5/8"	5.5"	AH 20/25/30/40/50
Land Rover	5	5/8"	6.5"	AH 40/50
Bedford	6	18mm	205mm	60H-6/75H-6
Bedford	8	18mm	275mm	75H-8/80-8
Bedford	8	20mm	275mm	90H-8/92H-8
USA Tractor	6	9/16"   5/8"	6.0"	AH40/50
Europe Truck	10	22mm	335mm	90H-10/92H-10/100H-10/110H-10
Earthmover	12	24mm	425mm	150H-12



# AXLE ENQUIRIES & ORDER FORM

## ENQUIRY/ORDER DETAILS

Company		Contact	Email
Phone	Fax	Order Number	Date
Postal Address		Delivery Address	

### Freight

☐ OTR

☐ Yours (If yours, nominate which company you would like to use \_\_\_\_\_)

## AXLE DETAILS

Part Number	Required Carry Capacity	Maximum Speed

## AXLE SPECIFICATIONS

### Material

☐ Round Bar Size \_\_\_\_\_

☐ Square Bar Size \_\_\_\_\_

Distance Between Outside Face of Hub Flanges (Dimension L)

Pitch Circle Diameter (Stud Pattern) (Dimension B)

--	--

Spigot Diameter (Dimension A)

Number of Studs (Bolts)

Stud Diameter (Thread) (Dimension N)

--	--	--

### Wheel Nut Taper

☐ 60°

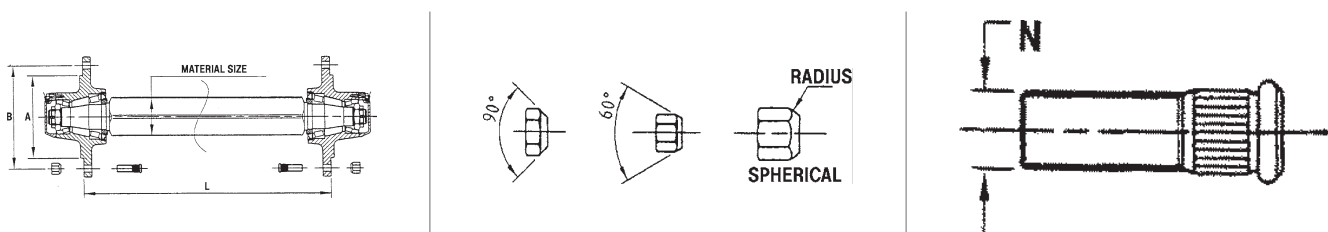
☐ 90°

☐ Spherical

☐ Other

Additional Requirements &amp; Comments

--



**NOTE:** OTR is committed to delivering high quality products. The correct completion of this sheet, and the accuracy of your measurements will ensure that the product we produce will suit your requirements. If you have further enquiries, please contact Customer Service **1300 CALL OTR**. The manufacture of any products is subject to availability of components and technical considerations. Completion of this form does not commit you to buy. It simply assists us to prepare our quotation. This guide is only as good as the information you supply. When in doubt call OTR.



# STUB AXLE ENQUIRIES & ORDER FORM

## ENQUIRY/ORDER DETAILS

Company		Contact	Email
Phone	Fax	Order Number	Date
Postal Address		Delivery Address	

### Freight

☐ OTR

☐ Yours (If yours, nominate which company you would like to use \_\_\_\_\_)

## AXLE DETAILS

Part Number	Required Carry Capacity	Maximum Speed

## AXLE SPECIFICATIONS

### Material

☐ Round Bar Size \_\_\_\_\_

☐ Square Bar Size \_\_\_\_\_

Distance Between Outside Face of Hub Flanges (Dimension L)

Pitch Circle Diameter (Stud Pattern) (Dimension B)

--	--

Spigot Diameter (Dimension A)

Number of Studs (Bolts)

Stud Diameter (Thread) (Dimension N)

--	--	--

### Wheel Nut Taper

☐ 60°

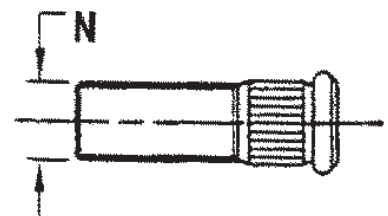
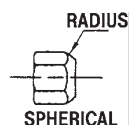
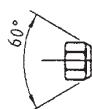
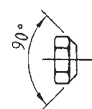
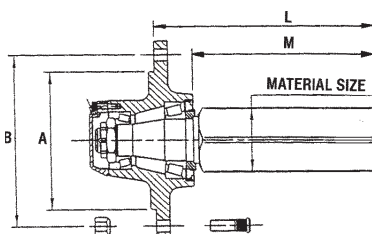
☐ 90°

☐ Spherical

☐ Other

Additional Requirements &amp; Comments

--



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[illegible]





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Version 4.1  
Updated June 2025



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