

Brake Drums



OTR1601B

- **B Suffix Denotes Eccentrically Balanced**
- **All Cast Surfaces Painted**
- **All Machined Surfaces Are Coated For Rust Prevention**



OTR1602B

P/N	Brake Size	Bolt Holes & Size	Bolt Circle Diameter	Pilot Diameter	Overall Depth	CROSS REFERENCE		
						Webb®	Gunite™	Dayton™
OTR1501B	15 X 4	10 - 1.28	11.25	8.78	8.85	61528B	3721AX	----
OTR1601B	16.5 X 7	10 - 1.00	11.25	8.78	10.62	66864B®	3600AX	123207
OTR1602B	16.5 X 7	10 - 1.00	11.25	8.78	10.62	66884B®	3576AX	123365
OTR1603	16.5 X 7	10 - .81	11.25	8.53	10.62	66893F	3166A	122607
OTR1605	16.5 X 7	5/6 - .78/66	11.00	9.44	8.38	67518F	2983CX	122222
OTR1606	16.5 X 7	10 - .84	11.25	9.44	9.50	62200F	2705X	12582
OTR1607	16.5 X 7	10 - .97	10.83	9.00	10.62	66875F	3141BX	123409
OTR1608B	16.5 X 7	10 - .81	11.25	9.00	10.62	66895B	3141X	122550
OTR1610	16.5 X 7	10 - .81	11.25	9.50	8.75	68730F	3018AX	122126
OTR1611	16.5 X 7	10 - .81	11.25	9.44	10.75	60876F	3120X	120877

Wheel Hubs



2359P



5113P



9348ABS



9348P

All hubs are with cups and without studs, except for the 9348 series that can be special ordered with studs.

P/N	Hole	Stud Type	Inner Outer Cups	Comments	Bolt Hole	Pilot Diam	CROSS REFERENCE		
							Webb®	Euclid®	Reyco®
1631ABS	10	Serrated	HM518410 HM518410	Uses 6 hole hubcap & OTR1601B drum	11 1/4"	8 3/4"	2343F	----	----
2359P	10	Shoulder	653 HM212011	----	11 1/4"	9 7/16"	12213N	E2359	406
2360P	10	Shoulder	HM218210 HM212011	----	11 1/4"	9 7/16"	10019N	E2360	401
2665P	10	Shoulder	HM218210 HM212011	----	8 3/4"	7 1/8"	10519N	E2665	----
5107P	10	Serrated	HM218210 HM212011	----	11 1/4"	8 17/32"	10209N	E5107	405
5113P	10	Serrated	HM518410 HM518410	Uses screw on hubcap	11 1/4"	8 17/32"	1320ZN	E5113	409
9348ABS	10	Serrated	HM218210 HM212011	Includes ABS ring	11 1/4"	8 3/4"	20231-OT®	----	412
9348P	10	Serrated	HM218210 HM212011	----	11 1/4"	8 3/4"	20231-O®	E9348	412

Steel Wheels



- **Tubeless**
- **E-Coated & Powder Coated White**
- **10 Hole - 285.75mm Bolt Circle**
- **10 Hole - 220mm Bore**
- **Tire Valves Included & Mounted**

P/N	Wheel Size	Pilot	Hand Holes	Wheel Offset	Disc	Recommended Valve	Maximum Load (lbs.)
SW22.5D	22.5x8.25	Spoke Wheel	----	----	----	----	7400
SW22.5H	22.5x8.25	Hub	2	6.62"	.437"	TR572	7400
SW22.5S	22.5x8.25	Stud	2	6.62"	.437"	TR572	7400
SW24.5H	24.5x8.25	Hub	2	6.62"	.437"	TR573	7300
SW24.5S	24.5x8.25	Stud	2	6.62"	.437"	TR573	7200

Aluminum Wheels




- **Single Piece of Forged Aluminum**
- **All 10 Hole Applications**
- **Tire Valves Included in Box, Not Mounted**

P/N	Size	Pilot	Polish	Approx. Weight	Accuride Cross	Alcoa Cross
AW24.5S	24.5 X 8.25	Stud	Unpolished	62 lbs.	27599ANP	983120
AW24.5SPI	24.5 X 8.25	Stud	Inside	62 lbs.	27599AIP	983122
AW24.5H	24.5 X 8.25	Hub	Unpolished	62 lbs.	29362ANP	983640
AW24.5HPO	24.5 X 8.25	Hub	Outside	62 lbs.	29362AOP	983641
AW24.5HPI	24.5 X 8.25	Hub	Inside	62 lbs.	29362AIP	983642
AW22.5S	22.5 X 8.25	Stud	Unpolished	52 lbs.	28615ANP	883110
AW22.5SPO	22.5 X 8.25	Stud	Outside	52 lbs.	28615AOP	883111
AW22.5SPI	22.5 X 8.25	Stud	Inside	52 lbs.	28615AIP	883112
AW22.5H	22.5 X 8.25	Hub	Unpolished	52 lbs.	29644ANP	883640
AW22.5HPO	22.5 X 8.25	Hub	Outside	52 lbs.	29644AOP	883641
AW22.5HPI	22.5 X 8.25	Hub	Inside	52 lbs.	29644AIP	883642



WHEEL NUTS

SPOKE WHEEL NUTS

	PART NUMBER	OUTER THREAD	INNER THREAD	INR THREAD DEPTH	HEX	OVERALL HEIGHT	GRADE	APPLICATION & FINISH
	WN4961	N/A	3/4" - 16	N/A	1 1/16"	5/8"	8	Locknut - Zinc
WN4963	N/A	3/4" - 10	N/A	1 1/4"	23/32"	5	Flat Both Sides - Zinc	

INNER CAP NUTS

SLV = Silver Zinc Chromate
YEL = Yellow Zinc Chromate
















	PART NUMBER	OUTER THREAD	INNER THREAD	INR THREAD DEPTH	HEX	OVERALL HEIGHT	GRADE	APPLICATION & FINISH
	WN5978L	1 1/8" - 16	3/4" - 16	1 15/16"	N/A	3 1/16"	8	Dual Mount Aluminum Wheels - YEL
WN5978R	1 1/8" - 16	3/4" - 16	1 15/16"	N/A	3 1/16"	8	Dual Mount Aluminum Wheels - YEL	
WN5988L	1 1/8" - 16	3/4" - 16	1 7/8"	N/A	3 1/16"	8	Dual Mount Aluminum Wheels - YEL	
WN5988R	1 1/8" - 16	3/4" - 16	1 7/8"	N/A	3 1/16"	8	Dual Mount Aluminum Wheels - YEL	
	WN7895L	1 1/8" - 16	3/4" - 16	1 1/4"	N/A	2 7/32"	8	Dual Mount Steel Wheels - YEL
	WN7895R	1 1/8" - 16	3/4" - 16	1 1/4"	N/A	2 7/32"	8	Dual Mount Steel Wheels - YEL
	WN7896L	1 1/8" - 16	3/4" - 16	1 1/4"	N/A	2 9/16"	8	Steel Inner/Aluminum Outer - SLV
	WN7896R	1 1/8" - 16	3/4" - 16	1 1/4"	N/A	2 9/16"	8	Steel Inner/Aluminum Outer - SLV
	WN7897L	1 1/8" - 16	3/4" - 16	1 3/4"	N/A	3 1/16"	8	Steel Inner/Aluminum Outer - YEL
	WN7897R	1 1/8" - 16	3/4" - 16	1 3/4"	N/A	3 1/16"	8	Steel Inner/Aluminum Outer - YEL

DISC WHEEL NUTS

SLV = Silver Zinc Chromate
YEL = Yellow Zinc Chromate

	PART NUMBER	OUTER THREAD	INNER THREAD	INR THREAD DEPTH	HEX	OVERALL HEIGHT	GRADE	APPLICATION & FINISH
	WN5652L	N/A	3/4" - 16	N/A	1 1/2"	7/8"	8	Single Mount, Rear or Front - SLV
WN5652R	N/A	3/4" - 16	N/A	1 1/2"	7/8"	8	Single Mount, Rear or Front - SLV	
	WN5977L	N/A	1 1/8" - 16	N/A	1 1/2"	7/8"	8	Outer Dual or Large Single Stud - YEL
	WN5977R	N/A	1 1/8" - 16	N/A	1 1/2"	7/8"	8	Outer Dual or Large Single Stud - YEL
	WN6000	N/A	M22X1.5	N/A	33mm	31mm	8	2 Piece Flanged for Hub Piloted Unimount - Zinc, Teflon Coated

WHEEL STUDS

SPOKE WHEEL STUD								
 NOTE: Images not to size compared to other styles.	PART NUMBER	BODY DIAMETER	OVERALL LENGTH	BODY LENGTH	THREAD LENGTH	SERRATION LENGTH	GRADE	THREAD SIZE
	WS4956	N/A	3"	3"	1 1/16" 1 3/4"	N/A	8	3/4" - 10
STEER AXLE DRIVE STUD								
	NOTE: OVERALL LENGTH excludes head thickness							
	WS5982L	1.22"	3 3/4"	1 7/32"	2 1/4"	9/16"	8	1 1/8" - 16
WS5982R	1.22"	3 3/4"	1 7/32"	2 1/4"	9/16"	8	1 1/8" - 16	
SERRATED DRIVE STUDS								
	NOTE: OVERALL LENGTH excludes head thickness							
	WS4966L	.784	2 5/8"	1 1/4"	1 1/4"	1/2"	8	3/4" - 16
WS4966R	.784	2 5/8"	1 1/4"	1 1/4"	1/2"	8	3/4" - 16	
WS4967L	.784	2 7/8"	1 1/2"	1 1/4"	1/2"	8	3/4" - 16	
WS4967R	.784	2 7/8"	1 1/2"	1 1/4"	1/2"	8	3/4" - 16	
WS4968L	.784	2 7/8"	1 1/2"	1 1/4"	1/2"	8	3/4" - 16	
WS4968R	.784	2 7/8"	1 1/2"	1 1/4"	1/2"	8	3/4" - 16	
	WS5896L	.974	3 3/8"	1 3/8"	1 1/4"	1"	8	3/4" - 16
	WS5896R	.974	3 3/8"	1 3/8"	1 1/4"	1"	8	3/4" - 16
	WS8947L	.784 - .777	2 31/32"	1 13/32"	1 1/16"	1/2"	8	3/4" - 16
	WS8947R	.784 - .777	2 31/32"	1 13/32"	1 1/16"	1/2"	8	3/4" - 16
	WS8949L	.910 - .902	2 19/32"	31/32"	1 3/8"	13/32"	8	3/4" - 16
	WS8949R	.910 - .902	2 19/32"	31/32"	1 3/8"	13/32"	8	3/4" - 16
	WS8969L	.784	2 15/16"	1 5/16"	1 13/32"	1/2"	8	3/4" - 16
	WS8969R	.784	2 15/16"	1 5/16"	1 13/32"	1/2"	8	3/4" - 16
	WS8979L	.784	3 11/32"	1 9/32"	1 27/32"	1/2"	8	3/4" - 16
	WS8979R	.784	3 11/32"	1 9/32"	1 27/32"	1/2"	8	3/4" - 16
	WS9010L	.974	2 27/32"	13/16"	1 1/8"	1/2"	8	3/4" - 16
	WS9010R	.974	2 27/32"	13/16"	1 1/8"	1/2"	8	3/4" - 16
	WS10208L	.784	3 13/32"	1 7/16"	1 5/8"	1/2"	8	3/4" - 16
	WS10208R	.784	3 13/32"	1 7/16"	1 5/8"	1/2"	8	3/4" - 16
METRIC STUDS								
NOTE: OVERALL LENGTH excludes head thickness								
CLIPPED HEAD								
	WS5993	.981	4 1/8"	23/32"	3 1/6"	N/A	10.9	M22X1.5
SERRATED DRIVE STUDS								
	WS5997	.901	3 21/32"	7/8"	2 7/16"	13/32"	10.9	M22X1.5
	WS6034	.975	4 25/32"	23/32"	3 17/32"	3/8"	10.9	M22X1.5
	WS6035	.975	3 15/16"	23/32"	2 11/16"	3/8"	10.9	M22X1.5
	WS6036	.975	3 1/2"	23/32"	2 1/4"	3/8"	10.9	M22X1.5
	WS8980	.975	5 3/32"	7/8"	3 3/4"	1/2"	10.9	M22X1.5
	WS8981	.975	4"	7/8"	2 29/32"	1/2"	10.9	M22X1.5
	WS10219	.910	4 15/32"	1 9/16"	2 9/16"	1/2"	10.9	M22X1.5
	WS10221	.910	5 11/32"	1 9/16"	3 7/16"	1/2"	10.9	M22X1.5
	WS10676	.975	4 1/4"	7/16"	3 1/4"	1/2"	10.9	M22X1.5

Wheel Bearings



P/N	Description	P/N	Description
OTRHM212011	Bearing Cup	OTR3782	Bearing Cone
OTRHM212047	Bearing Cone	OTR39520	Bearing Cup
OTRHM212049	Bearing Cone	OTR39590	Bearing Cone
OTRHM218210	Bearing Cup	OTR47620	Bearing Cup
OTRHM218248	Bearing Cone	OTR47679	Bearing Cone
OTRHM518410	Bearing Cup	OTR47686	Bearing Cone
OTRHM518445	Bearing Cone	OTR572	Bearing Cup
OTRSET401	Set 572/580	OTR580	Bearing Cone
OTRSET403	Set 592A/594A	OTR592A	Bearing Cup
OTRSET406	Set 3782/3720	OTR594A	Bearing Cone
OTRSET413	Set HM212011/HM212049	OTR6420	Bearing Cup
OTRSET414	Set HM218210/HM218248	OTR6461A	Bearing Cone
OTRSET415	Set HM518445/HM518410	OTR653	Bearing Cup
OTR3720	Bearing Cup	OTR663	Bearing Cone

Precise wheel bearing adjustment is critical to the life of all wheel end components. OTR suggests using TMC's Recommended Wheel Bearing Adjustment Procedure, see below: (Note - for single nut locking systems, consult the manufacturer's specifications.)

- Step 1:** Using clean lubricant and the same lubricant as used in the hub or axle, lubricate the bearing.
- Step 2:** While rotating the wheel, tighten the adjusting nut to 200 ft. lbs.
- Step 3:** Back off the adjusting nut one full turn.
- Step 4:** While rotating the wheel, tighten the adjusting nut to 50 ft. lbs.
- Step 5:** Back off the adjusting nut per the following:
 - Steer axle - single nut application with 12 threads per inch - 1/6 turn.
 - Steer axle - single nut application with 18 threads per inch - 1/4 turn.
 - Install cotter pin for final position.
 - Steer axle - double nut application with 14 or 18 threads per inch - 1/2 turn.
 - Drive or trailer axle - double nut application with 12 or 16 threads per inch - 1/4 turn.
- Step 6:** Torque jam nut per the following (double nut applications):
 - Steer axle - nut size less than 2 5/8" - 200-300 ft. lbs.
 - Steer axle - nut size 2 5/8" or more - 300-400 ft. lbs.
 - Drive axle - tang type washer - 200-275 ft. lbs.
 - Drive axle - dowel type washer - 300-400 ft. lbs.
 - Trailer axle - nut size less than 2 5/8" - 200-300 ft. lbs.
 - Trailer axle - 2 5/8" or more - 300-400 ft. lbs.
- Step 7:** Check end-play with dial indicator, should be .001" - .005":
 - A. Attach dial indicator to the hub or drum. Adjust so its plunger is against the end of the spindle and the line of action is parallel to the axis of the spindle.
 - B. Holding the hub or drum @ the 3 o'clock and 9 o'clock positions. Push in while oscillating the assembly approximately 1/8 turn. Zero the dial indicator.
 - C. Repeat 7B while pulling the assembly out. Read the indicator: acceptable end play is .001" - .005."

OTR assumes no responsibility for bearing adjustment in suggesting TMC's procedure.

Manual Slacks



P/N	Cam Diam	Spline	Arm Length	CROSS REFERENCE	
				Bendix®	Haldex®
OTR44041	1 5/8"	37	6"	283411	KN44041
OTR44051	1 1/2"	28	5" - 6"	286965	KN44051
OTR44061	1 1/2"	28	5 1/2" - 6 1/2"	288753	KN44061
OTR44071	1 1/2"	28	5" - 6" - 7"	-----	KN44071
OTR47001	1 1/2"	10	5" - 6" - 7"	278323	KN47001
OTR47011	1 1/2"	10	5 1/2" - 6 1/2"	278321	KN47011
OTR48031	1 1/4"	10	4 1/2" - 5 1/2"	278302	KN48031

Additional applications available.

Automatic Slacks - Direct Replacement For Bendix® Design



P/N	Cam Diam	Spline	Arm Length	Bendix®	CROSS REFERENCE	
					Meritor®	Gunite®
OTR65170	1 1/2"	10	5 1/2"	065170	R801041	AS1132/AS1146
OTR65172	1 1/2"	10	6"	065172	R801042	AS1133/AS1147
OTR65174	1 1/2"	28	5 1/2"	065174	R801073	AS1140/AS1149
OTR65175	1 1/2"	28	6"	065175	R801074	AS1141/AS1151
OTR65179	1 5/8"	37	6"	065179	R801102	AS1144

Automatic Slacks ■ Direct Replacement For Gunite® Design

P/N	Cam Diameter	Spline	Arm Length	CROSS REFERENCE	
				Gunite®	Bendix®
OTR51132	1 ½"	10	5 ½"	AS1132	065170
OTR51133	1 ½"	10	6"	AS1133	065172
OTR51140	1 ½"	28	5 ½"	AS1140	065174
OTR51141	1 ½"	28	6"	AS1141	065175



Automatic Slacks ■ Direct Replacement For Haldex® Design

P/N	Cam Diameter	Spline	Arm Length	Application	CROSS REFERENCE	
					Euclid®	Haldex®
OTR10140	1 ½"	28	5", 6"	Drive	E6925B	400-10140
OTR10141	1 ½"	28	5 ½", 6 ½"	Drive	E6927B	400-10141
OTR10143	1 ½"	10	5 ½", 6 ½"	Drive	E6924B	400-10143
OTR10144	1 ½"	28	6"	Drive	E6918A	400-10144
OTR10211	1 ⅝"	28	5 ½"	Trailer	E6944	400-10211
OTR10212	1 ½"	28	6"	Trailer	E6942	400-10212



Automatic Slacks ■ Direct Replacement For Meritor® Design

P/N	Cam Diameter	Spline	Arm Length	Euclid®	CROSS REFERENCE	
					Meritor®	Gunite®
OTR801041	1 ½"	10	5 ½"	E11398	R801041	AS1032/AS1132
OTR801042	1 ½"	10	6"	E11399	R801042	AS1033/AS1133
OTR801073	1 ½"	28	5 ½"	E11401	R801073	AS1040/AS1140
OTR801074	1 ½"	28	6"	E11402	R801074	AS1041/AS1141



Spring Brakes

OTR3030SB



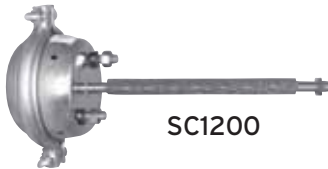
OTR3030PBK



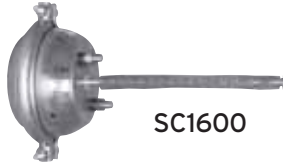
P/N	Description	Full Stroke	Effective Stroke
OTR2424SB	2424 Combination Brake Assembly	2.5"	2.0"
OTR2430SB	2430 Combination Brake Assembly	2.5"	2.0"
OTR3030SB	3030 Combination Brake Assembly	2.5"	2.0"
OTR3030SB-13C	3030 Combination Brake Assembly - 13" Rod For Intraax	2.5"	2.0"
OTR3030SB-LS*	3030 Combination Brake Assembly - Long Stroke	3.0"	2.5"
OTR3030PBK	3030 Piggyback Kit	2.5"	2.0"
OTR3030PBK-LS*	3030 Piggyback Kit - Long Stroke	3.0"	2.5"
OTR3036SB	3036 Combination Brake Assembly	2.5"	2.0"
OTR3636SB	3636 Combination Brake Assembly	3.0"	2.5"

*Note - LS denotes Long Stroke and square casting at port is visual identifier.

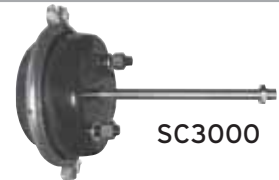
Service Chambers



SC1200



SC1600



SC3000

P/N	Description	Mounting Studs Center-to-Center	Push Rod Thread	Stud Length	Air Inlets	Diaphragm
SC09	Type 9	3.0"	1/2 - 20 UNF	1.12"	3/8"	BD09
SC1200	Type 12	3.0"	1/2 - 20 UNF	1.12"	3/8"	BD12
SC1600	Type 16	3.0"	1/2 - 20 UNF	1.12"	3/8"	BD16
SC2000	Type 20	4.75"	5/8 - 18 UNF	1.50"	3/8"	BD20
SC2400	Type 24	4.75"	5/8 - 18 UNF	1.50"	3/8"	BD24
SC2400LS*	Type 24	4.75"	5/8 - 18 UNF	1.50"	3/8"	BD24LS
SC3000	Type 30	4.75"	5/8 - 18 UNF	1.50"	3/8"	BD30
SC3000LS*	Type 30	4.75"	5/8 - 18 UNF	1.50"	3/8"	BD30LS
SC3600	Type 36	4.75"	5/8 - 18 UNF	1.75"	3/8"	BD36

*Note - LS denotes Long Stroke

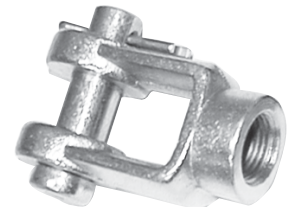
Diaphragms



P/N	Description	Diameter
BD09	Type 9	5
BD12	Type 12	5.5
BD16	Type 16	6
BD20	Type 20	6.5
BD24	Type 24	7
BD24LS*	Type 24	7
BD30	Type 30	8
BD30LS*	Type 30	8
BD36	Type 36	8.75

Clamp Band Kit

P/N	Description
CB24K	Type 24
CB30K	Type 30



Yokes & Clevis Pin

P/N	Description	Chamber Size
36470P	1/2 Pin - 5/8 Rod Yoke	
36480P	5/8 Pin - 5/8 Rod Yoke	20 - 24 - 30
36490P	1/2 Pin - 1/2 Rod Yoke	20 - 24 - 30
19100P	1/2 Clevis Pin	9 - 12 - 16
19102P	5/8 Clevis Pin	N/A

N/A