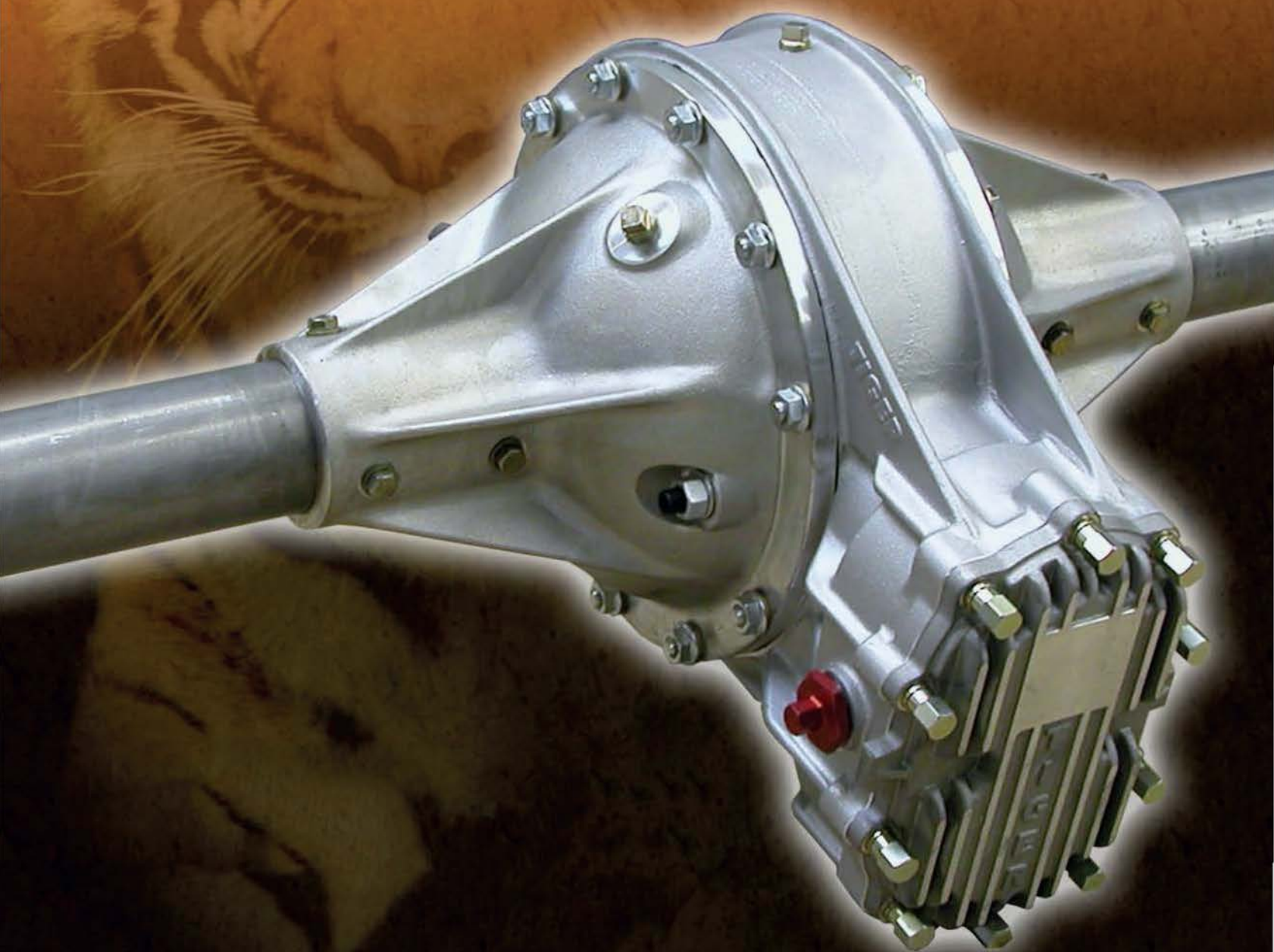


TIGER

QUICK CHANGE



Our Mission...

At Tiger Quick Change, we have combined years of experience and cutting edge technology to design the highest quality strength to weight ratio rear end possible.

The design engineers worked with major seal and bearing manufacturers to develop a kit to reduce horsepower robbing friction. All of these efforts are made to give our customers the edge on the race track!



Tiger Quick Change

is located in Mt. Ulla, North Carolina, just outside Mooresville, Race City USA.

ORDER POLICY

-  Order by part number.
-  Tiger will NOT be responsible for incorrect orders that are placed without part numbers.
-  Please specify shipping instructions on all orders.



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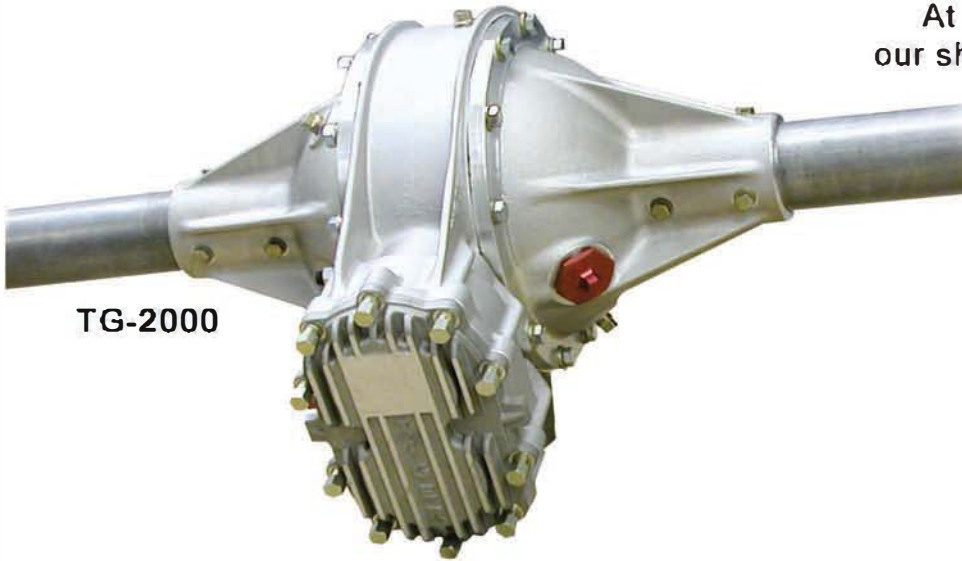
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RACE READY



TG-2000

At Tiger, every rear end that leaves our shop is "Race Ready". Our rear ends come standard with:

Aluminum 6 Rib Bells
HD Gear Cover with Bearings
Heat Treated Jackshaft
Pinion Nose Roller Bearings
Posi-Lock Nut Assembly
Viton Yoke Seal
4:86 Ring & Pinion

Reducing power loss through the driveline is all part of putting together the total winning package!

COMPLETE REAR ENDS

TG-2000	Complete Tiger Standard Assembly (Aluminum Center & Bells)
TG-2010	Complete Tiger Low Drag Assembly (Aluminum Center & Bells)
TG-5002	Complete Tiger / Bert Magnesium Rear With Bert Magnesium Bells
TG-M2000	Complete Tiger Standard Assembly (Magnesium Center-Aluminum Bells)
TG-M2010	Complete Tiger Low Drag Assembly (Magnesium Center-Aluminum Bells)
TG-M2012	Complete Tiger Low Drag Assembly (Magnesium Center-Magnesium Bells)

DIFFERENTIAL OPTIONS

TG-2902	Exchange / Diamond Track Differential
TG-2906	Exchange / Gleason Differential
TG-2915	Exchange / Bert 33/31 Spline Lite Weight Spool
TG-2921	Exchange / Standard Aluminum Locker
TG-2921L	Exchange / Standard Aluminum Locker With Left Side Lockup
TG-2939	Exchange / Light Weight Aluminum Locker
TG-2939L	Exchange / Light Weight Aluminum Locker With Left Side Lockup
TG-2940	Exchange / Ultra Light Weight Spool

CENTER OPTIONS

TG-2904	Exchange / Gundrilled Hex Drive Jackshaft-Heat Treated (For Pump Option)
TG-2922	Exchange / Gundrilled Jackshaft-Heat Treated
TG-2923	Exchange / 4.12 Ring & Pinion
TG-2924	Exchange / 1310 Drive Yoke With Pully
TG-2925	Exchange / 1350 Drive Yoke
TG-2926	Exchange / 1350 Drive Yoke With Pully
TG-2910	REM Polish Ring & Pinion
TG-2936	Thermal Dispersant Coating
TG-2937	REM Polish Lower Jackshaft
TG-2912	EDM Ring Gear
TG-2040	Rear Cover Pump Option With Cooler And Lines (For Pinion)
TG-2089	Rear Cover Pump Option With Cooler And Lines (For Jackshaft)



TUBE OPTIONS

TG-2930	Exchange / 2 1/2" GN Steel Tubes (Straight)
TG-2931	Exchange / 2" GN Steel Tubes (Straight)
TG-2932	Exchange / Wide 5 Chrome Moly Tubes (Straight)
TG-2933	Exchange / 2 1/2" GN Chrome Moly Tubes (Straight)
TG-2934	Exchange / 2" GN Chrome Moly Tubes (Straight)
TG-2935	Exchange / Aluminum Wide 5 Tubes With Steel Snouts (Straight)
TG-2938	Exchange / 2" GN Chrome Moly Tubes (2.5 Degree Camber)
TG-2941	Exchange / 2 1/2" GN Steel .219 Wall Tubes (Straight)
TG-2943	Exchange / 2" GN Steel Tubes (2.5 Degree Camber)
TG-2944	Exchange / 16 Bolt Steel Tubes
TG-2945*	Exchange / Wide 5 Chrome Moly Tubes (.5 Degree - 1.5 Degree Camber)
TG-2946*	Exchange / One Wide 5 Steel Tube (.5 Degree - 1.5 Degree Camber)
TG-2947*	Exchange / 2 1/2" GN Chrome Moly Tubes (.5 Degree - 2.5 Degree Camber)
TG-2948	Exchange / 2 1/2" GN Steel Tubes (2.0 Degree Camber)
TG-2949	Exchange / One Piece Aluminum Tubes
TG-2950	Exchange / 16 Bolt Chrome Moly Tubes
TG-2954*	Exchange / Wide 5 Steel Tubes (.5 Degree - 1.5 Degree Camber)
TG-2958	Exchange / 2 1/2" GN Steel Tubes (2.25 Degree Camber)
TG-2959	Exchange / 2 1/2" GN Steel Tubes (2.5 Degree Camber)
TG-2960	Exchange 16 Bolt Aluminum Tubes (Black)

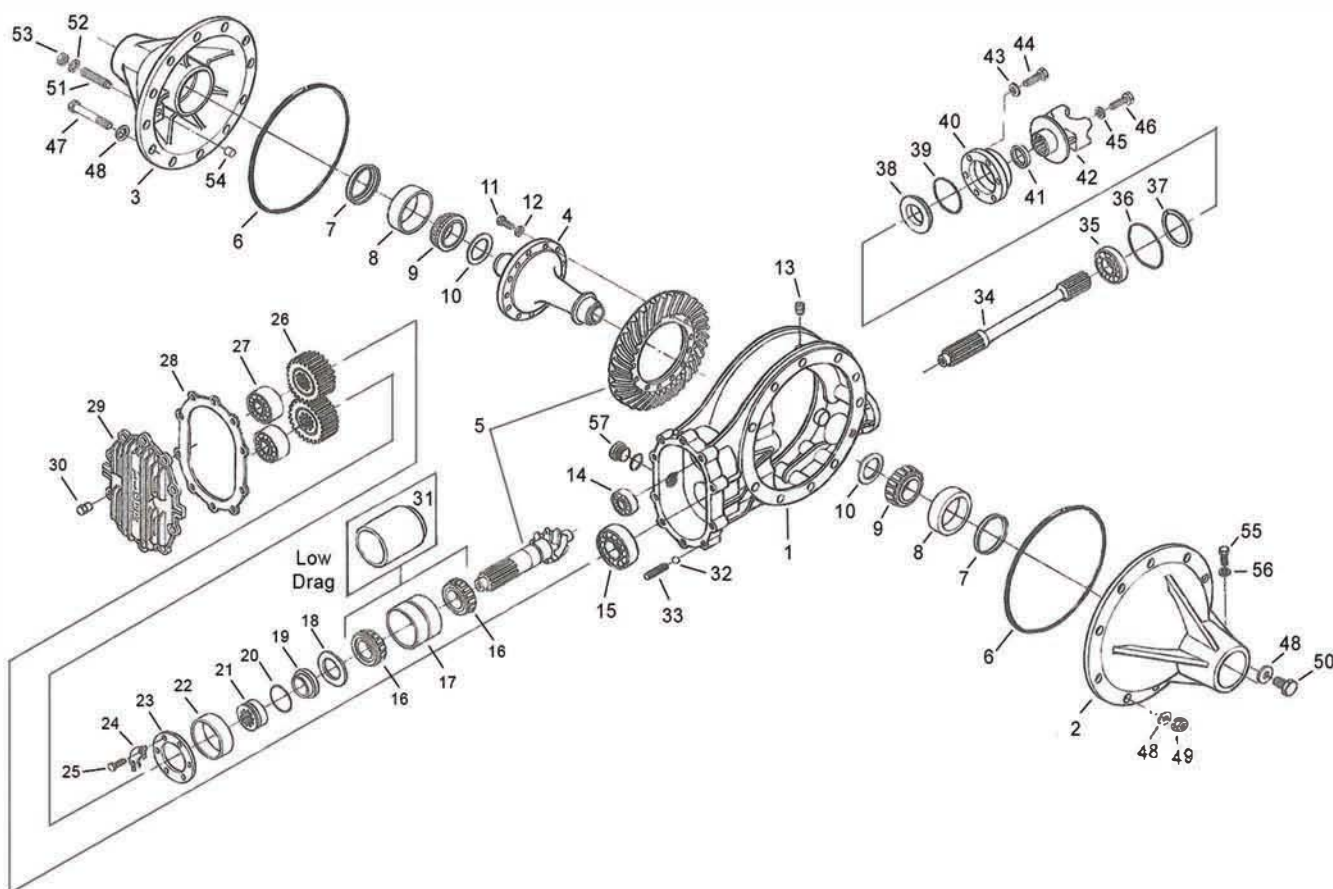
* Specify Camber When Ordering

TIGER REAR END

ITEM NO.	PART NO.	DESCRIPTION
1	TG-2101	Aluminum Sprint Center Section
2	TG-2201	Aluminum 6 Rib Right Side Bell
3	TG-2202	Aluminum 6 Rib Left Side Bell
4	TG-2401	Aluminum 31 Spline Spool
5	TG-2601	4.86 Ring & Pinion (Standard)
6	TG-2203	O-Ring (6 Rib)
7	TG-2204	Low Drag Side Bell Seal (Locker Seal)
8	TG-2206	Side Bell Bearing Race
9	TG-2406	Carrier Bearing (Differentials & Spools)
10	TG-2408	Shim Kit
11	TG-2055	Ring Gear Bolts (Threaded Ring Gear)
12	TG-2054	Ring Gear Bolts (Thru Bolts)
13	TG-2214	3/8 Square Head Pipe Plug
14	TG-2606	Pinion Nose Roller Bearing
15	TG-2501	Lower Shaft Shielded Ball Bearings
16	TG-2610	Pinion Shaft Bearing Tapered Cone
17	TG-2611	Pinion Shaft Bearing Cup
18	TG-2612	Pinion Bearing Washer
19	TG-2613	Posi Lock Nut (Right Hand)
20	TG-2617	Posi Lock O-Ring
21	TG-2618	Posi Lock Retainer
22	TG-2619	Pinion Retaining Ring Spacer
23	TG-2620	Pinion Retaining Plate
24	TG-2622	Retaining Plate Locking Tab
25	TG-2621	3/8-16 x 1 Retaining Plate Bolts
26	TG-SET+Set #	Gear Sets
27	TG-2302	Ball Bearing (Rear Cover)
28	TG-2313	Rear Cover Gasket
29	TG-2303	Gear Cover Without Bearings
30	TG-2075	Steel High Nut
31	TG-2607	Low Drag Pinion Bearing
32	TG-2308	5/16 Diameter Steel Balls
33	TG-2307	Gear Cover Studs 3/8-16 x 1.5
34	TG-2503	Lower Heat Treated Jackshaft
35	TG-2504	Lower Shaft Front Bearing
36	TG-2701	Outer Seal Plate O-Ring
37	TG-2702	Seal Plate Snap Ring
38	TG-2704	Viton Yoke Seal
39	TG-2713	Inner Seal Plate O-Ring

REAR END EXPLODED VIEW

ITEM NO.	PART NO.	DESCRIPTION
40	TG-2705	Seal Plate Aluminum
41	TG-2708	Yoke Spacer
42	TG-2709	Drive Yoke 1310
43	TG-2706	3/8 Flat Washer
44	TG-2707	3/8-16 x1.25 Seal Plate Bolts
45	TG-2711	Drive Yoke Retaining Washer
46	TG-2712	Drive Yoke Bolt 3/8-24x1.25
47	TG-2207	Side Bell Thrubolt 7/16-20x5 1/2
48	TG-2209	Side Bell Thrubolt SAE Flat Washer 7/16
49	TG-2210	Side Bell Thrubolt 7/16-20 Flanged Lock Nut
50	TG-2208	Side Bell Bolt 7/16-14 1.25
51	TG-2624	1/2-13 Adjusting Screw
52	TG-2626	Aluminum Flat Washer
53	TG-2627	1/2-1/3 Jam Nut
54	TG-2628	Thrust Block
55	TG-2211	Side Bell Tube Bolt 3/8-24x1
56	TG-2213	3/8 Flat Washer
57	TG-2102	Inspection Plug With O-Ring



STANDARD KIT:

- 🔥 Aluminum 6 Rib Bells
- 🔥 Aluminum Spool
- 🔥 Standard Ring and Pinion Bearing
- 🔥 Heat Treated Lower Jackshaft
- 🔥 Standard Carrier and Yoke Seals
- 🔥 HD Rear Cover with Bearings
- 🔥 Posi Lock Nut Assembly
- 🔥 Pinion Nose Roller Bearing
- 🔥 4:86 Ring and Pinion

LOW DRAG KIT:

- 🔥 Aluminum 6 Rib Bells
- 🔥 Aluminum Spool
- 🔥 Low Drag Pinion Bearing
- 🔥 Low Drag Yoke Seals
- 🔥 Low Drag Carrier Seals
- 🔥 Heat Treated Lower Jackshaft
- 🔥 HD Rear Cover with Bearings
- 🔥 Posi Lock Nut Assembly
- 🔥 Pinion Nose Roller Bearing
- 🔥 4:86 Polished Ring and Pinion

**QUICK CHANGE REAR
END OPTIONS:**

- 🔥 EDM Ring Gear
- 🔥 Polished Ring and Pinion
- 🔥 Aluminum Standard Locker
- 🔥 Aluminum Light Weight Locker
- 🔥 Ultra Light Weight Spools
- 🔥 Gundrilled Lower Shaft
- 🔥 4:12 Ring and Pinion
- 🔥 Diamond Track
- 🔥 Gleason
- 🔥 Thermal Coating TG-2936
- 🔥 Aluminum Tubes



ALUMINUM AND MAGNESIUM BELLS

PART NO.	DESCRIPTION
TG-2201	Aluminum 6 Rib / Right Side Bell
TG-2202	Aluminum 6 Rib / Left Side Bell
TG-2201BA	Bert Aluminum Right Side Bell (For Aluminum Smart Tubes)
TG-2202BA	Bert Aluminum Left Side Bell (For Aluminum Smart Tubes)
TG-2216	Bell Inspection Plug With O-Ring
TG-2406	Side Bell Inner Bearing Race
TG-2203	6 Rib Side Bell O-Ring
TG-2037	Complete Thrust Block Kit For Left Side Bell
TG-2219	Complete Side Bell Bolt Kit
TG-2217	8 Rib Side Bell O-Ring
TG-2204	Low Drag Locker Seals
TG-2226	Aluminum 8 Rib / Right Side Bell
TG-2227	Aluminum 8 Rib / Left Side Bell
TG-M2226	Magnesium 8 Rib / Right Side Bell
TG-M2227	Magnesium 8 Rib / Left Side Bell

TG-2201
Aluminum Right
Side Bell



TG-2202
Aluminum Left
Side Bell

TG-2037
Thrust Block Kit
(For Left Side)



TG-2216
Inspection
Plug With
O-Ring



TG-2204
Low Drag
Locker Seal

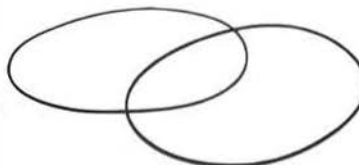
TG-M2226
Magnesium
8 Rib Right Side Bell



TG-M2227
Magnesium 8 Rib
Left Side Bell



TG-2203
6 Rib Side
Bell O-Ring



TG-2217
8 Rib Side
Bell O-Ring

AVAILABLE WITH
OPTIONAL THERMAL
COATING!

LOCKERS & DIFFERENTIALS

LOCKERS AND TORQUE SENSING DIFFERENTIALS

TG-2400	31 Spline Steel Gleason Differential
TG-2403	31 Spline Aluminum QC Locker (Standard)
TG-2403L	31 Spline Aluminum QC Locker With Left Side Lock Up
TG-2413	31 Spline Black Gold Differential
TG-2429	31 Spline Aluminum Light Weight QC Locker
TG-2429L	31 Spline Aluminum Light Weight QC Locker With Left Side Lock Up
TG-2431	31 Spline Diamond Track Differential



TG-2400



TG-2429



TG-2431

LOCKER PARTS

TG-2204	Low Drag Locker Seal
TG-2404	15 Tooth Locker Internal Assy (Fits Light Weight Or Standard Lockers)
TG-2404L	15 Tooth Locker Internal Assy With Left Side Lock Up (Fits LW Or STD Lockers)
TG-2433	Orange Spring (55 lbs.)
TG-2432	Blue Spring (65 lbs.)
TG-2405	Yellow Spring (75 lbs.)
TG-2430	Purple Spring (88 lbs.)
TG-2437	White Spring (100 lbs.)
TG-2409*	Standard Aluminum Locker Housing
TG-2410*	Standard Aluminum Locker Cap
TG-2414*	Lightweight Aluminum Locker Housing
TG-2415*	Lightweight Aluminum Locker Cap
TG-2426	Left Side Lock Up Plate for Locker
TG-2438	Snap Ring for Standard and Light Weight Locker
TG-2425	Spacer Ring Light Weight Locker
TG-2427	Spacer for Standard Locker
TG-2406RP	368A Carrier Bearings (REM Polished)
TG-2407RP	368S Carrier Bearings (REM Polished)



TG-2405
Yellow Spring



TG-2430
Purple Spring



TG-2426
Left Side
Lock Up Plate

* Must be sold as a set



TG-2403
Aluminum QC
Standard
Locker



TG-2204
Low Drag Locker
Seal

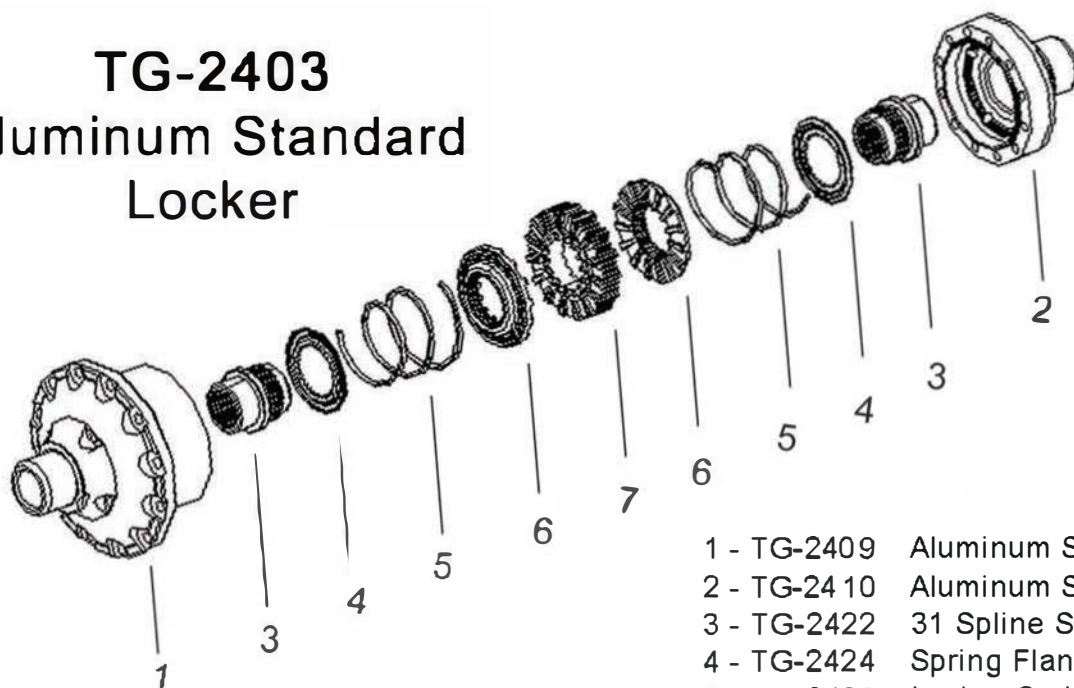


TG-2406RP
TG-2407RP
Carrier Bearings



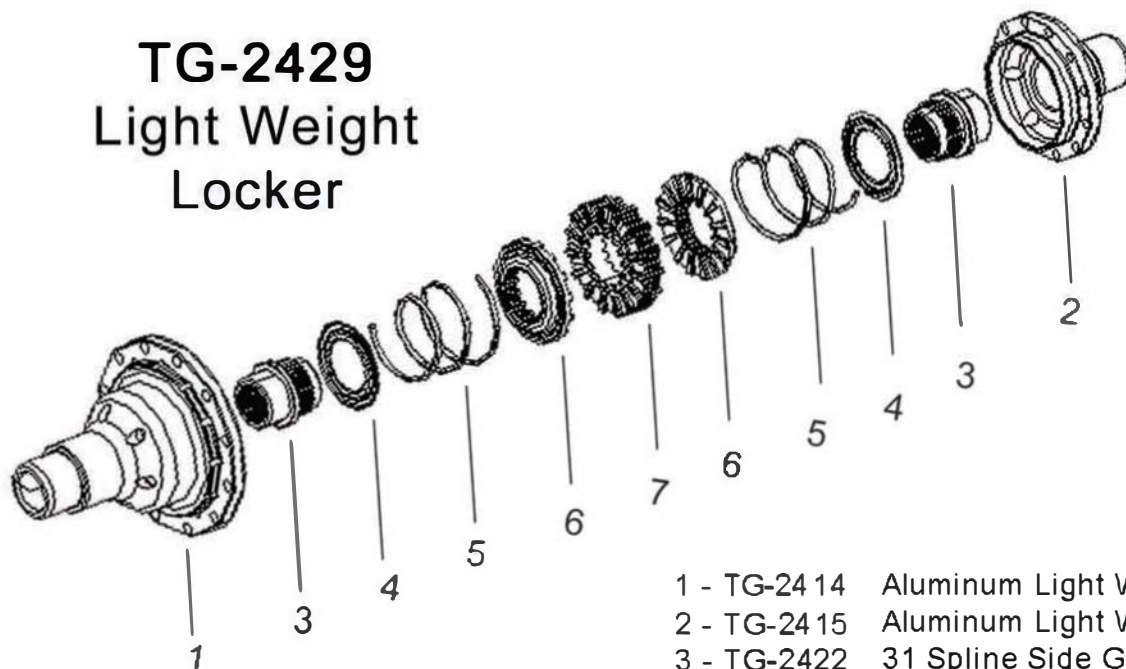
TG-2404
Locker Internal
Assembly

TG-2403 Aluminum Standard Locker



- 1 - TG-2409 Aluminum Standard Locker Housing
- 2 - TG-2410 Aluminum Standard Locker Cap
- 3 - TG-2422 31 Spline Side Gear
- 4 - TG-2424 Spring Flange
- 5 - TG-2405 Locker Spring (Yellow)
- 6 - TG-2423 Ratchet Side Plate
- 7 - TG-2420 Center Ratchet Gear & Dog R
- 8 - TG-2436 Snap Ring (Not Shown)
- 9 - TG-2425 Spacer Ring (Not Shown)

TG-2429 Light Weight Locker



- 1 - TG-2414 Aluminum Light Weight Locker Housing
- 2 - TG-2415 Aluminum Light Weight Locker Cap
- 3 - TG-2422 31 Spline Side Gear
- 4 - TG-2424 Spring Flange
- 5 - TG-2405 Locker Spring (Yellow)
- 6 - TG-2423 Ratchet Side Plate
- 7 - TG-2420 Center Ratchet Gear & Dog R
- 8 - TG-2436 Snap Ring (Not Shown)
- 9 - TG-2425 Spacer Ring (Not Shown)

SPOOLS

PART NO.

DESCRIPTION

TG-2401	31 Spline Aluminum Spool (Standard)
TG-2402	31/33 Spline Bert Aluminum Spool (Light Weight)
TG-2428	31 Spline Ultra Light Weight Spool
TG-2401S	31 Spline Aluminum Spool With 2.030 Bearing Diameter



TG-2401
31 Spline Aluminum Spool
(Standard)



TG-2428
Ultra Light
Weight Spool



TG-2402
Bert Aluminum
Light Weight Spool



SEALS

PART NO.

DESCRIPTION

TG-2810	Low Drag Hub Seal (Fits Howe)
TG-2816	Low Drag Hub Seal (Fits Wilwood)
TG-2204	Low Drag Locker Seals
TG-2703	Low Drag Yoke Seals
TG-2704	Viton Yoke Seal
TG-2205	Standard Locker Seal
TG-2811	Rear Hub Seal
TG-2817	Super Speedway Hub Seal
TG-2818	Short Track Low Drag Seal

TG-2810
Low Drag
Hub Seal



TG-2204
Low Drag
Locker Seal



TG-2817
Super Speedway
Hub Seal



TG-2818
Short Track
Low Drag Seal



TG-2205
Standard
Locker Seal

TG-2703
Low Drag
Yoke Seal



TG-2811
Rear Hub
Seal

COMPLETE LOW DRAG BEARING AND SEAL KIT



TG-2023

KIT INCLUDES

PART NO.	DESCRIPTION
TG-2203	(2) 6-Rib Side Bell O-Rings
TG-2204	(2) Low Drag Carrier Seals
TG-2406RP	Carrier Bearings (Polished)
TG-2302	Rear Cover Bearings
TG-2313	Rear Cover Gasket
TG-2408	Shim Kit
TG-2501	Rear Lower Shaft Bearing
TG-2504	Front Lower Shaft Bearing
TG-2606	Pinion Nose Roller Bearing
TG-2607	Low Drag Pinion Shaft Bearing
TG-2701	Seal Plate O-Ring
TG-2703	Low Drag Yoke Seal

RING GEAR & PINION & LOW DRAG BEARING & SEAL KITS

KIT NO.	DESCRIPTION
TG-2221	4.86 Light Weight Ring Gear & Pinion, Includes TG-2023
TG-2222	4.12 Light Weight Ring Gear & Pinion, Includes TG-2023

RING AND PINIONS



PART NO. DESCRIPTION

TG-2042	Loaded 4.86 Ring & Pinion Standard (Timken Bearing)
TG-2043	Loaded 4.86 Ring & Pinion Low Drag (Angular Contact Bearing)
TG-2048	Loaded 4.12 Ring & Pinion Standard (Timken Bearing)
TG-2049	Loaded 4.12 Ring & Pinion Low Drag (Angular Contact Bearing)
TG-2602	4.12 TIGER Ring & Pinion
TG-2601	4.86 TIGER Ring & Pinion

TG-2049
Loaded Ring
& Pinion

COMPONENT PARTS

PART NO. DESCRIPTION

TG-2919	Ultra Light Weight Ring Gear
TG-2912	EDM Process To Ring Gears
TG-2900	Machine Hex In Customer Pinion For Pump Drive
TG-2952	Cryogenic Gear Treatment
TG-2606	Pinion Nose Roller Bearing
TG-2607	Low Drag Pinion Shaft Bearing (Angular Contact)
TG-2610	Standard Pinion Shaft Bearing Cone (Timken)
TG-2611	Standard Pinion Shaft Bearing Cup (Timken)
TG-2612	Pinion Bearing Washer
TG-2608	Low Drag Flanged Pinion Shaft Bearing (Angular Contact)
TG-2054	Ring Gear Thru Bolt Kit
TG-2055	Threaded Ring Gear Bolt Kit
TG-2056	Posi Lock Kit (Left Hand)
TG-2057	Posi Lock Kit (Right Hand)



TG-2919
Ultra Light Weight
Ring Gear



TG-2054
Ring Gear Thru
Bolt Kit



TG-2055
Threaded Ring Gear
Bolt Kit

TG-2608
Low Drag
Flanged Pinion
Shaft Bearing



TG-2056 (Left)
TG-2057 (Right)
Posi Lock Kit



TG-2607
Low Drag
Pinion Shaft
Bearing

HUBS, BEARINGS AND RACES

PART NO. DESCRIPTION

TG-3119	2 Piece Drive Flange For Cambered Tubes
TG-3011	Aluminum Adapter Cap For Drive Flange
TG-3121	Wide 5 Cambered Drive Flange (5 Bolt Pattern)
TG-3122	Wide 5 Cambered Drive Flange (8 Bolt Pattern)
TG-3124	Billet One Piece Hub
TG-3125	Drive Flange
TG-3003	Wide 5 Outer Bearing
TG-3003P	Wide 5 Outer Bearing (Polished)
TG-3004	Wide 5 Inner Bearing
TG-3004P	Wide 5 Inner Bearing (Polished)
TG-3005	Wide 5 Outer Bearing Race
TG-3005P	Wide 5 Outer Bearing Race (Polished)
TG-3006	Wide 5 Inner Bearing Race
TG-3006P	Wide 5 Inner Bearing Race (Polished)
TG-3013	2 1/2" Grand National Timken Bearing Race
TG-3013P	2 1/2" Grand National Timken Bearing Race (Polished)
TG-3014	2 1/2" Grand National Timken Bearing
TG-3014P	2 1/2" Grand National Timken Bearing (Polished)



TG-3124
Billet One
Piece Hub

TG-3119
2 Piece Cambered
Drive Flange



TG-3006P
Wide 5 Inner
Bearing Race
(Polished)



TG-3004P
Wide 5 Inner
Bearing
(Polished)



TG-3003P
Wide 5 Outer
Bearing
(Polished)

TG-3005P
Wide 5 Outer
Bearing Race
(Polished)

TG-3011
Aluminum
Adapter
Cap



TG-3121
Wide 5 2 Piece
Cambered
Drive Flange
(5 Bolt Pattern)

WHEEL BEARING KITS

PART NO. DESCRIPTION

TG-3028KP	Wide 5 Tiger Bearing Set Polished
TG-3031KPS	Wide 5 Tiger Bearing Set Polished With Low Drag Seals
TG-3029KTP	Wide 5 Timken Bearing Set Polished
TG-3030KTPS	Wide 5 Timken Bearing Set Polished With Low Drag Seals
TG-3032KT	Timken Performance Hub Bearing Kit (One Hub)
TG-3038	Timken Wheel Bearing Grease



TG-3032KT
Timken Hub
Bearing Kit
(One Hub)



TG-3038
Timken Wheel
Bearing
Grease

SUSPENSION

PART NO.	DESCRIPTION	CAMBER
TG-3015L	Truck Arm Pad (Left)	
TG-3015R	Truck Arm Pad (Right)	
TG-3116	Tie Bar (One Side)	
TG-3117	Tie Bar Kit (Complete)	
TG-3018	Aluminum Spacer	
TG-3019	Aluminum 16 Bolt Brake Bracket Adapter	
TG-3020	Wide 5 16 Bolt Brake Bracket	STRAIGHT
TG-3021	Wide 5 16 Bolt Brake Bracket	.5 DEGREE
TG-3022	Wide 5 16 Bolt Brake Bracket	1.0 DEGREE
TG-3023	Wide 5 16 Bolt Brake Bracket	1.5 DEGREE
TG-3020	5 on 5 16 Bolt Brake Bracket	STRAIGHT
TG-3024	5 on 5 16 Bolt Brake Bracket	.5 DEGREE
TG-3025	5 on 5 16 Bolt Brake Bracket	1.0 DEGREE
TG-3026	5 on 5 16 Bolt Brake Bracket	1.5 DEGREE
TG-3012	16 Bolt Brake Bracket Assembled	
TG-3016	GN Cambered Brake Bracket	
TG-3034	GM Style Weld On Brake Bracket	



TG-3016
GN Cambered
Brake Bracket



TG-3020
(Straight)



TG-3034 GM Style
Weld On Brake
Bracket



TG-3117 (Complete)
TG-3116 (One Side)
Tie Bar Kit



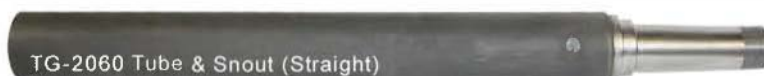
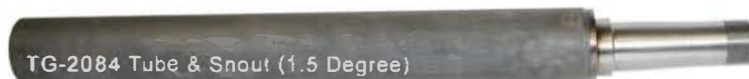
TG-3012
16 Bolt Brake
Bracket
Assembled



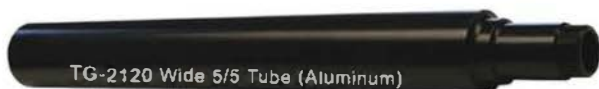
TG-3015 L/R
Truck Pads

COMPLETE AXLE TUBE ASSEMBLY

Wide 5

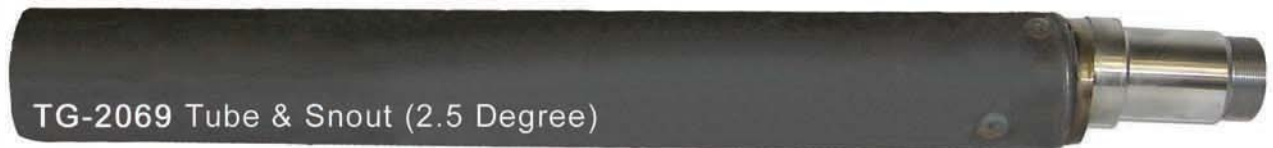


DESCRIPTION	MATERIAL	CAMBER	P/N ASSY.	P/N SNOOT ONLY
Wide 5 Tube & Snout Assy	STEEL	STRAIGHT	TG-2060	TG-2849
Wide 5 Tube & Snout Assy	STEEL	.5 DEGREE	TG-2051	TG-2850
Wide 5 Tube & Snout Assy	STEEL	1.0 DEGREE	TG-2052	TG-2851
Wide 5 Tube & Snout Assy	STEEL	1.5 DEGREE	TG-2084	TG-2852
Wide 5 Tube & Snout Assy	CHROME MOLY	STRAIGHT	TG-2063	TG-2820
Wide 5 Tube & Snout Assy	CHROME MOLY	.5 DEGREE	TG-2053	TG-2821
Wide 5 Tube & Snout Assy	CHROME MOLY	1.0 DEGREE	TG-2085	TG-2822
Wide 5 Tube & Snout Assy	CHROME MOLY	1.5 DEGREE	TG-2086	TG-2823
Wide 5 Tube & Snout Assy w/Steel Snout	ALUMINUM	STRAIGHT	TG-2071	N/A
Wide 5 One Piece Tube & Snout Assy	ALUMINUM	STRAIGHT	TG-2073	N/A
Wide 5 Bert Aluminum Smart Tube	ALUMINUM	STRAIGHT	TG-2112	N/A
31 Spline Solid Axle	STEEL		TG-3002	
31 Spline Gundrilled Axle	STEEL		TG-3001	
Wide 5 16 Bolt Tube	ALUMINUM		TG-2121	
Wide 5/5 Tube	ALUMINUM		TG-2120	



COMPLETE AXLE TUBE ASSEMBLY

2" GN 5 ON 5



DESCRIPTION	MATERIAL	CAMBER	P/N ASSY.	P/N SNOUT ONLY
2" GN Tube & Snout Assy	STEEL	STRAIGHT	TG-2061	TG-2831
2" GN Tube & Snout Assy	STEEL	.5 DEGREE	TG-2093	TG-2832
2" GN Tube & Snout Assy	STEEL	1.0 DEGREE	TG-2104	TG-2833
2" GN Tube & Snout Assy	STEEL	1.5 DEGREE	TG-2105	TG-2834
2" GN Tube & Snout Assy	STEEL	2.0 DEGREE	TG-2106	TG-2835
2" GN Tube & Snout Assy	STEEL	2.5 DEGREE	TG-2069	TG-2836
2" GN Tube & Snout Assy	CHROME MOLY	STRAIGHT	TG-2064	TG-2825
2" GN Tube & Snout Assy	CHROME MOLY	.5 DEGREE	TG-2107	TG-2826
2" GN Tube & Snout Assy	CHROME MOLY	1.0 DEGREE	TG-2108	TG-2827
2" GN Tube & Snout Assy	CHROME MOLY	1.5 DEGREE	TG-2109	TG-2828
2" GN Tube & Snout Assy	CHROME MOLY	2.0 DEGREE	TG-2110	TG-2829
2" GN Tube & Snout Assy	CHROME MOLY	2.5 DEGREE	TG-2111	TG-2824

TG-3003P
Wide 5 Outer
Bearing
(Polished)



TG-3005P
Wide 5 Outer
Bearing Race
(Polished)

TG-3006P
Wide 5 Inner
Bearing Race
(Polished)



TG-3004P
Wide 5 Inner
Bearing
(Polished)

COMPLETE AXLE TUBE ASSEMBLY

2 1/2" GN 5 ON 5



DESCRIPTION	MATERIAL	CAMBER	P/N ASSY.	P/N SNOOT ONLY
2 1/2" GN Tube & Snout Assy (Right)	STEEL	STRAIGHT	TG-2062R	TG-2830R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	STRAIGHT	TG-2062L	TG-2830L
2 1/2" GN Tube & Snout Assy (Right)	STEEL	1.0 DEGREE	TG-2078R	TG-2859R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	1.0 DEGREE	TG-2078L	TG-2859L
2 1/2" GN Tube & Snout Assy (Right)	STEEL	1.5 DEGREE	TG-2097R	TG-2860R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	1.5 DEGREE	TG-2097L	TG-2860L
2 1/2" GN Tube & Snout Assy (Right)	STEEL	2.0 DEGREE	TG-2077R	TG-2862R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	2.0 DEGREE	TG-2077L	TG-2862L
2 1/2" GN Tube & Snout Assy (Right)	STEEL	2.25 DEGREE	TG-2096R	TG-2863R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	2.25 DEGREE	TG-2096L	TG-2863L
2 1/2" GN Tube & Snout Assy (Right)	STEEL	2.5 DEGREE	TG-2098R	TG-2864R
2 1/2" GN Tube & Snout Assy (Left)	STEEL	2.5 DEGREE	TG-2098L	TG-2864L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	STRAIGHT	TG-2065R	TG-2865R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	STRAIGHT	TG-2065L	TG-2865L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	1.0 DEGREE	TG-2099R	TG-2866R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	1.0 DEGREE	TG-2099L	TG-2866L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	1.5 DEGREE	TG-2058R	TG-2868R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	1.5 DEGREE	TG-2058L	TG-2868L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	2.0 DEGREE	TG-2079R	TG-2869R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	2.0 DEGREE	TG-2079L	TG-2869L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	2.25 DEGREE	TG-2083R	TG-2870R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	2.25 DEGREE	TG-2083L	TG-2870L
2 1/2" GN Tube & Snout Assy (Right)	CHROME MOLY	2.5 DEGREE	TG-2053R	TG-2871R
2 1/2" GN Tube & Snout Assy (Left)	CHROME MOLY	2.5 DEGREE	TG-2053L	TG-2871L



TG-3013
2 1/2" GN
Bearing Race

TG-3014
2 1/2" GN
Bearing



TG-2807
Snout Lock
Washer

TG-2808
Snout Lock Nut



TG-2034 (Steel)
TG-2035 (Aluminum)
TG-2036 (Chrome Moly)
Tube Seals

2" GN 5 ON 5 BOLT ON SNOOTS

PART NO.	DESCRIPTION	CAMBER
TG-2853	2" GN 5 On 5 Bolt On Snouts	STRAIGHT
TG-2853BB	2" GN 5 On 5 Bolt On Snouts (For Tiger Brake Bracket)	STRAIGHT
TG-2854	2" GN 5 On 5 Bolt On Snouts	.5 DEGREE
TG-2854BB	2" GN 5 On 5 Bolt On Snouts (For Tiger Brake Bracket)	.5 DEGREE
TG-2855	2" GN 5 On 5 Bolt On Snouts	1.0 DEGREE
TG-2855BB	2" GN 5 On 5 Bolt On Snouts (For Tiger Brake Bracket)	1.0 DEGREE
TG-2856	2" GN 5 On 5 Bolt On Snouts	1.5 DEGREE
TG-2856BB	2" GN 5 On 5 Bolt On Snouts (For Tiger Brake Bracket)	1.5 DEGREE
TG-2857	2" GN 5 On 5 Bolt On Snouts	2.0 DEGREE
TG-2857BB	2" GN 5 On 5 Bolt On Snouts (For Tiger Brake Bracket)	2.0 DEGREE

WIDE 5 BOLT ON SNOOTS

PART NO.	DESCRIPTION	CAMBER
TG-2839	Wide 5 Bolt On Snouts	STRAIGHT
TG-2839BB	Wide 5 Bolt On Snouts (For Tiger Brake Bracket)	STRAIGHT
TG-2840	Wide 5 Bolt On Snouts - Heat Treated	STRAIGHT
TG-2841	Wide 5 Bolt On Snouts	.5 DEGREE
TG-2841BB	Wide 5 Bolt On Snouts (For Tiger Brake Bracket)	.5 DEGREE
TG-2842	Wide 5 Bolt On Snouts	1.0 DEGREE
TG-2842BB	Wide 5 Bolt On Snouts (For Tiger Brake Bracket)	1.0 DEGREE
TG-2843	Wide 5 Bolt On Snouts	1.5 DEGREE
TG-2843BB	Wide 5 Bolt On Snouts (For Tiger Brake Bracket)	1.5 DEGREE
TG-2845	16 Bolt Weld In Adaptor (For Steel Tubes)	
TG-2846	16 Bolt Weld In Adaptor (For Chrome Moly Tubes - .120 Wall)	
TG-2848	Wide 5 Eight Bolt Collar For Seal	
TG-2848BB	Wide 5 Eight Bolt Collar For Seal (For Tiger Brake Bracket)	
TG-2848OR	O-Ring For Collar (TG-2848 - TG-2848BB)	



TG-2843
1.5 Camber
Wide 5 Bolt On Snout



TG-2845 (For Steel)
TG-2846 (For Chrome Moly)

These adapters can be used with any 8 bolt snout for more adjustability in camber and toe.

TG-3012
16 Bolt Tube
(Shown With Optional
Brake Bracket
Assembly)

TG-2848BB



TG-2819
Wilwood Low Drag
Hub Seal (For Aluminum
Snouts Only)



TG-2066 - 16 Bolt Chrome Moly Tube
TG-2067 - 16 Bolt Steel Tube



Bert Wide 5 Hub for Smart Tube



Bert Birdcage



Bert Wide 5 Hub Assembly for Smart Tube CTD-001



Birdcage Shown with Tubes & Rear End



Complete Center Section with CTD Side Bell



Bert Smart Tube & Bell Tiger Quick Change

TIGER HIGH PERFORMANCE SYNTHETIC GEAR OIL

-for more information, see page 41



TG-5200
5 Gallon



TG-5201
1 Gallon

10" SPRINT & QUICK CHANGE CENTER SECTIONS

PART NO.

DESCRIPTION

TG-2101	Aluminum 10" Sprint Center
TG-M2101	Magnesium 10" Sprint Center
TG-2021	Aluminum Standard 10" Center Section Kit
TG-2022	Aluminum Low Drag 10" Center Section Kit
TG-M2021	Magnesium Standard 10" Center Section Kit
TG-M2022	Magnesium Low Drag 10" Center Section Kit
TG-2936	Optional Thermal Coating (Includes Thermal Coating of Center, Bells, Rear Cover and Front Seal Plate)



TG-2101
Aluminum 10"
Sprint Center

TG-M2101
With Optional
Thermal
Coating



TG-2022
Center
Section Kit



TG-2046 (Pinion)
TG-2047 (Jackshaft)

Rear Cover With
Bearings & Pump

When mounting
on pinion, the
pinion must be
machined for hex
drive.

10" SPRINT & QUICK CHANGE CENTER COMPONENTS

PART NO.

DESCRIPTION

TG-2030	Front Seal Plate Assembly (Viton Seal)		TG-2031 Seal Plate Assembly
TG-2031	Front Seal Plate Assembly (Low Drag Seal)		
TG-2703	Low Drag Yoke Seal		TG-2703 Low Drag Yoke Seal
TG-2704	Viton Yoke Seal		
TG-2038	Magnesium HD Rear Cover With Bearings		
TG-2044	Aluminum HD Rear Cover With Bearings		
TG-2046	Magnesium HD Rear Cover With Bearings & Pump (For Pinion)		
TG-2047	Magnesium HD Rear Cover With Bearings & Pump (For Jackshaft)		
TG-2039	Magnesium HD Cover With Bearings and Pump Mount Machined		
TG-2040	Rear Cover Pump Kit For Pinion (Includes Lines, Brackets, Cooler & Fittings)		
TG-2089	Rear Cover Pump Kit For Jackshaft (Includes Lines, Brackets, Cooler & Fittings)		
TG-2087	Rear Cover Pump Only (Jackshaft)		
TG-2088	Rear Cover Pump Only (Pinion)		

10" SPRINT & QUICK CHANGE CENTER COMPONENTS

PART NO.	DESCRIPTION
TG-2076	Rear Cover High Nut Kit (Steel)
TG-2070	Rear Cover High Nut Kit (Aluminum)
TG-2306	Rear Cover Stud Kit
TG-2092	Replacement Hex Pinion For Pump
TG-2094	Rear End Cooler
TG-2502	Heat Treated Gun Drilled Jackshaft
TG-2506	Heat Treated Hex Drive Gun Drilled Jackshaft
TG-2503	Heat Treated Solid Jackshaft
TG-2102	Inspection Plug With O-Ring For Sprint Center
TG-2302	Gear Cover Bearings For HD Cover
TG-2501	Rear Jackshaft Bearing
TG-2504	Front Jackshaft Bearing
TG-2620	Pinion Retaining Plate (Steel)
TG-2622	Pinion Retaining Plate Tabs
TG-2709	1310 Drive Yoke
TG-2710	1310 Drive Yoke With Pulley
TG-2716	1350 Drive Yoke With Pulley
TG-2714	1350 Drive Yoke
TG-2718	1350 Yoke Straps
TG-2717	1310 Yoke Straps
TG-2720	1310 U Bolts
TG-2711	Drive Yoke Retaining Washer With Bolt
TG-2708	Drive Yoke Spacer
TG-2095	# 6 Rear End Cooler Fittings

TG-2076



TG-2070



TG-2092



TG-2622



TG-2709



TG-2716



TG-2717
TG-2718



TG-2708



TG-2503

TG-2502



TG-2506



TG-2711



TG-2712

TG-2620



Complete Kit-TG-2040 (Pinion)
TG-2089 (Jackshaft)



When mounting on pinion, the pinion must be machined for hex drive.



(Shown With
Optional Pump &
Cooling Kit)

TG-2102



TOOLS FOR SERIOUS RACERS!

TG-2081
Pinion Torque Tool



TG-5100

Tool kit for setting up quick change rear ends. It comes with a carrier bearing puller, and indicators for setting backlash on the ring & pinion. The spline shaft and threaded rod can be used for checking lockers and changing springs.



TOOLS FOR SERIOUS RACERS!



TG-3130
Short

Pit Sockets



TG-3131
Long

TG-5102

Tiger Rear End fixture tool for checking the straightness of a rear end.



Sportsman



SPLINE QUICK CHANGE GEAR CHART

Professional

GEAR SET NO. TG-SET:	4.11 Ring & Pinion (9-27 Teeth)		No. of Teeth	4.86 Ring & Pinion (7-34 Teeth)		4.57 Ring & Pinion	
	Low	High		Low	High	Low	High
1	4.11	4.11	28/28	4.86	4.86	4.57	4.57
2	3.96	4.26	27/28	4.68	5.04	4.74	4.41
5	3.94	4.28	24/25	4.66	5.07	4.76	4.38
15	3.90	4.33	19/20	4.61	5.12	4.81	4.34
15K	3.85	4.38	15/16	4.56	5.18	4.88	4.28
26	3.83	4.41	27/29	4.52	5.24	4.91	4.25
6	3.78	4.46	23/25	4.47	5.28	4.96	4.21
25	3.74	4.52	20/22	4.42	5.35	5.03	4.16
12	3.68	4.58	26/29	4.36	5.42	5.09	4.10
7	3.63	4.64	23/26	4.30	5.49	5.16	4.04
7K	3.58	4.69	21/24	4.23	5.54	5.22	4.00
17	3.55	4.76	19/22	4.19	5.63	5.29	3.95
8K	3.49	4.83	17/20	4.13	5.71	5.37	3.89
8	3.48	4.85	22/26	4.11	5.75	5.40	3.86
19	3.45	4.89	21/25	4.08	5.78	5.44	3.84
9K	3.42	4.93	25/30	4.05	5.83	5.48	3.81
9	3.39	4.97	19/23	4.01	5.88	5.53	3.77
11	3.35	5.04	22/27	3.96	5.97	5.61	3.72
3	3.31	5.10	25/31	3.92	6.03	5.67	3.68
13	3.29	5.14	20/25	3.89	6.08	5.71	3.65
18	3.25	5.19	19/24	3.85	6.13	5.77	3.62
4K	3.21	5.26	18/23	3.80	6.21	5.84	3.58
4	3.18	5.31	24/31	3.76	6.28	5.90	3.54
20	3.16	5.34	20/26	3.74	6.32	5.94	3.51
22	3.12	5.41	19/25	3.69	6.39	6.01	3.47
16	3.08	5.48	24/32	3.65	6.48	6.09	3.43
10	3.04	5.55	20/27	3.60	6.56	6.17	3.38
34	3.00	5.63	19/26	3.55	6.65	6.25	3.34
14	2.95	5.72	23/32	3.50	6.76	6.35	3.29
14K	2.93	5.76	20/28	3.47	6.81	6.40	3.26
35	2.91	5.80	17/24	3.44	6.86	6.49	3.24
32K	2.87	5.89	23/33	3.39	6.97	6.56	3.18
24	2.83	5.96	20/29	3.35	7.04	6.63	3.15
36	2.80	6.04	17/25	3.30	7.15	6.72	3.11
37	2.78	6.07	23/34	3.29	7.18	6.76	3.09
23	2.74	6.16	18/27	3.24	7.29	6.85	3.05
21	2.69	6.28	17/26	3.18	7.43	6.99	2.99
27	2.66	6.35	22/34	3.15	7.51	7.06	2.96
43	2.63	6.42	16/25	3.11	7.59	7.14	2.93
28	2.60	6.49	19/30	3.08	7.67	7.22	2.89
29	2.57	6.58	15/24	3.04	7.77	7.31	2.86
30	2.53	6.67	16/26	2.99	7.89	7.43	2.81
41	2.49	6.77	17/28	2.95	8.00	7.53	2.77
31	2.46	6.85	21/35	2.91	8.10	7.62	2.74
33K	2.43	6.94	16/27	2.88	8.20	7.71	2.71
33	2.41	7.00	17/29	2.85	8.28	7.79	2.68
31K	2.39	7.05	14/24	2.83	8.33	7.83	2.66
30K	2.37	7.12	15/26	2.80	8.42	7.92	2.64



TIGER REAR ENDS WEIGHT CHART

Complete Dirt Rear- Magnesium Center, Aluminum Bells, Aluminum Tubes, Spool,	
Standard Lower Shaft 4:12.....	86lbs.
1 Piece Aluminum Tube - 32 Inches Long.....	6.96lbs.
Standard W5 32 Inches Long.....	15.40lbs.
CM W5 32 Inches Long.....	11.76lbs.
Quick Change Standard Gear Set 16.....	6.28lbs.
Quick Change Lite Weight Gear Set 16.....	4.82 lbs.
8 Rib Right Bell Magnesium.....	6.80lbs.
8 Rib Left Bell Magnesium.....	5.82lbs.
Ultra Light Weight Ring Gear.....	6.2lbs.
Light Weight Locker.....	10.72lbs.
Standard Locker.....	14.68lbs.
Light Weight Spool.....	5.08lbs.
Standard Spool.....	5.62lbs.
Ring and Pinion.....	11.2lbs.
4.86 Standard Ring Gear.....	9.8lbs.
4.86 Light Weight.....	8.9lbs.
4.12 Standard.....	8.32lbs.
Standard Jackshaft.....	5.22lbs.
Light Jackshaft.....	3.96lbs.
Aluminum High Nuts Set Of 10pcs.....	.20lbs.
Standard High Nuts Set Of 10pcs.....	.46lbs.
Aluminum Right Bell.....	9.54lbs.
Aluminum Left Bell.....	8.38lbs.
Aluminum Center Section.....	18.68lbs.
Magnesium Center Section.....	12.98lbs.
Standard Quick Change Rear End.....	119lbs.
Solid Lower Shaft.....	5.50lbs.

TIGER SPECIFICATIONS

Threaded Ring Gear Bolts	55Ft/lbs
Non-Threaded Ring Gear Bolt / Locknut	55Ft/lbs
Pinion Retaining Plate	35Ft/lbs
Side Bell Thru Bolts	40Ft/lbs
Side Bell Stud Bolts	40Ft/lbs
Seal Plate	35Ft/lbs
Drive Yoke	50Ft/lbs

(Criss-Cross Pattern On All Bolts)

Pinion Bearing Rotational Preload (New)	20~25 in/lbs
Timken Only	
Pinion Bearing Rotational Preload (Used)	8~10 in/lbs
Timken Only	
Carrier Preload	Aluminum Spool .010
	Aluminum Locker .010
	Steel Spool 0.015
Ring & Pinion Backlash	0.008~0.012
Thrustblock Clearance	0.008~0.010 (1/8~1/4 turn)
Heating Temperature	200-250 degrees

**Always use anti seize when threading into aluminum*

BREAK-IN PROCEDURE:

Use 90w gear oil for the first race, first test, or first practice. Afterwards use preferred synthetic oil.

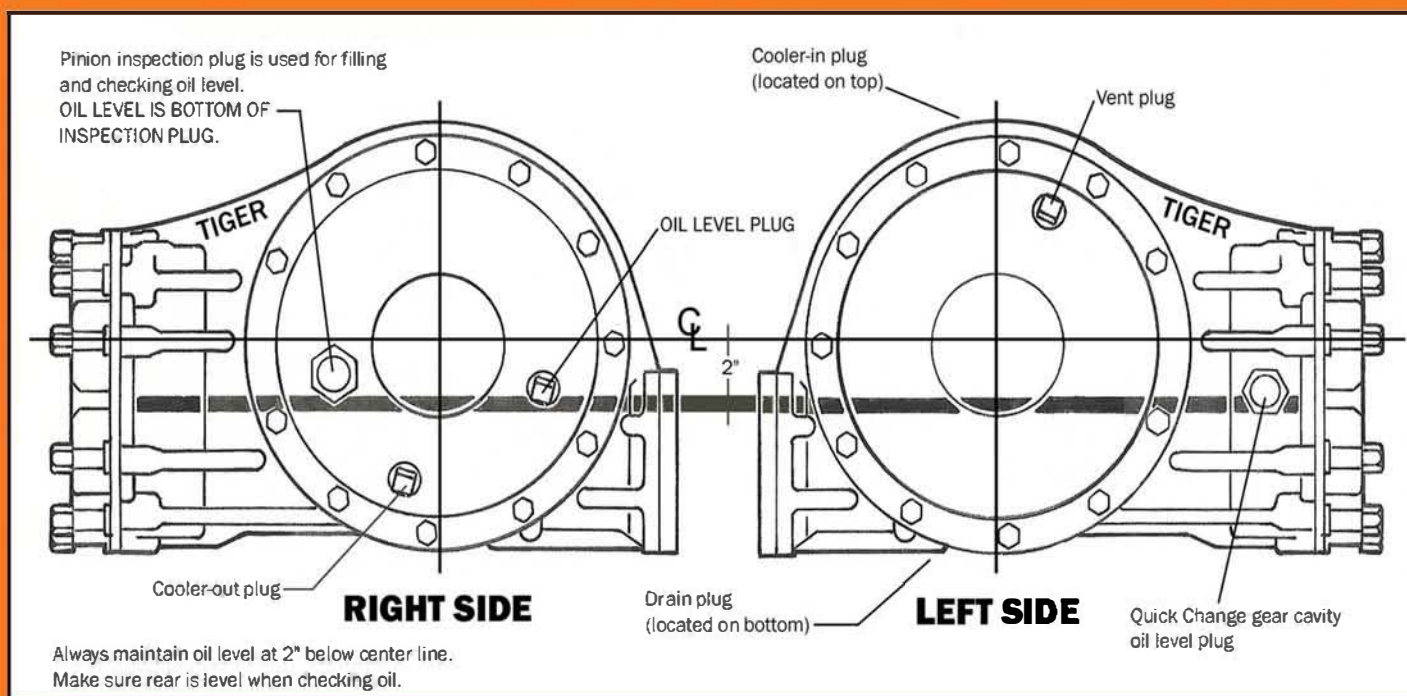
IMPORTANT!!

OVER-FILLING CAN CAUSE PROBLEMS AS WELL AS UNDER-FILLING!

OIL FILL & PLUMBING INSTRUCTIONS

Oil Fill & Plumbing Instructions for Pump

OVER-FILLING CAN CAUSE PROBLEMS AS WELL AS UNDER-FILLING



BUILT BY

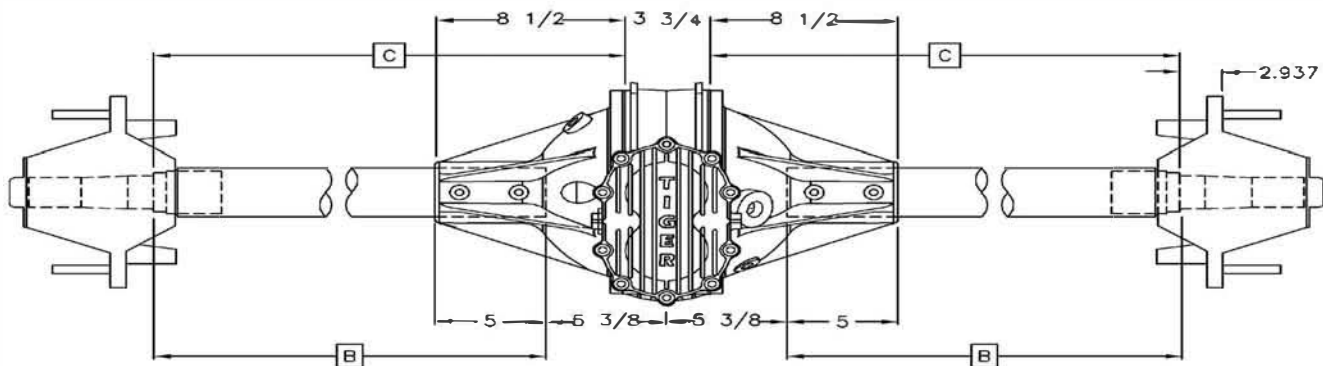
RACERS

FOR RACERS!

How To Measure Tube Length

Tiger measures all tubes from the B-Dimension.

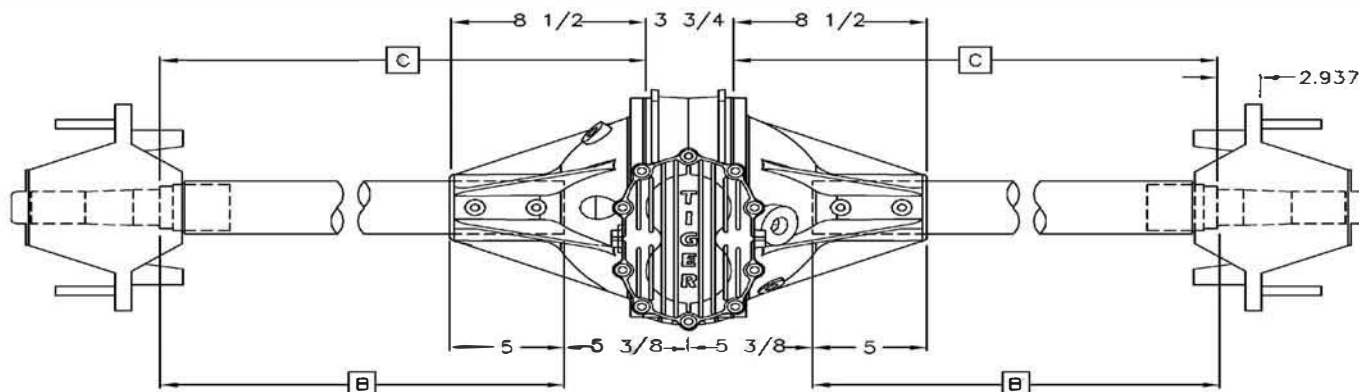
The B-Dimension is the area on the snout where the inner hub bearing seats against to the end of the tube; this includes the 5" installed in the bell.



How to measure tubes already installed in the bell:

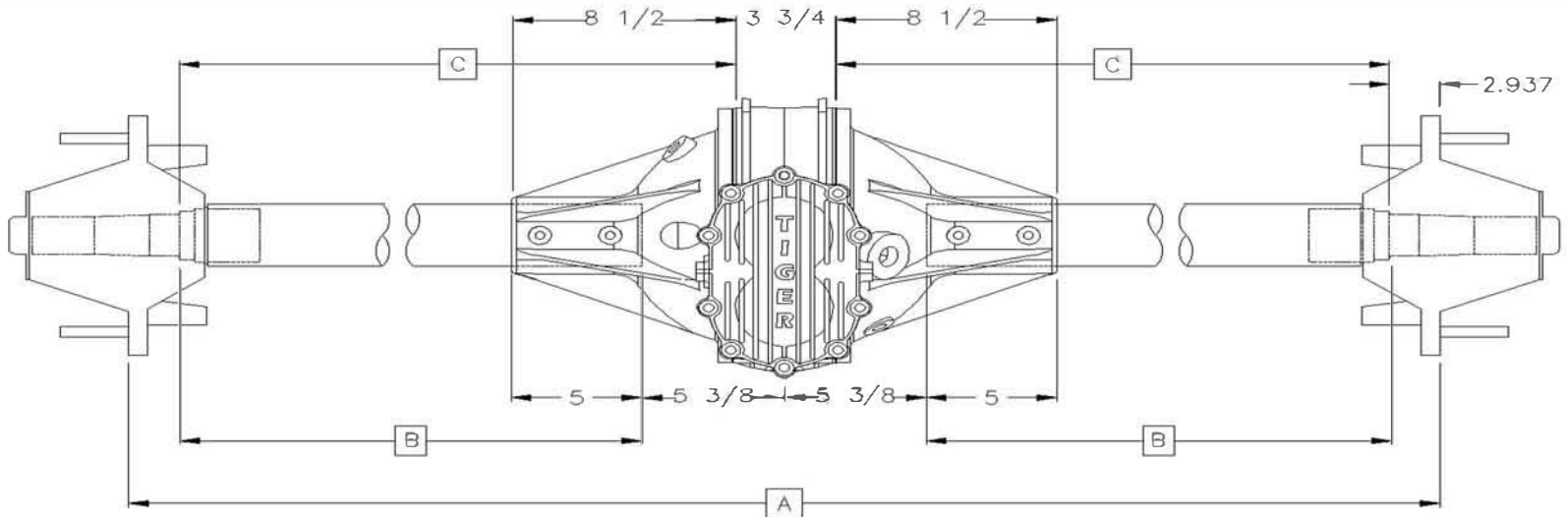
- Measure from the outer end of the bell to the B-Dimension on the snout (where the inner hub bearing seats)
- Add 5" for what is in the bell
- This will give you the proper B-Dimension Tube Length

DIMENSIONAL TECH SHEET



Tube Lengths B-DIM. W/5	1	Axle lengths for spool, STD Locker, Gleason, Diamond Track	2	Axle Lengths for LW Locker with -1-1/4 leftside	3	Axle Length for LW locker w/ + 1-1/4 right side
22"		34		32.5		35
22.5"		34.5		33		35.5
23"		35		33.5		36
23.5"		35.5		34		36.5
24"		36		34.5		37
24.5"		36.5		35		37.5
25"		37		35.5		38
25.5"		37.5		36		38.5
26"		38		36.5		39
26.5"		38.5		37		39.5
27"		39		37.5		40
5 x 5 2" PIN						
22"		32		31		33.5
22.5"		32.5		31.5		34
23"		33		32		34.5
23.5"		33.5		32.5		35
24"		34		33		35.5
24.5"		34.5		33.5		36
25"		35		34		36.5
25.5"		35.5		34.5		37
26"		36		35		37.5
26.5"		36.5		35.5		38
27"		37		36		38.5
5 x 5 G.N. 2-1/2 PIN						
19.5"		28.5		27		29.5
20"		29		27.5		30
20.5"		29.5		28		30.5
21"		30		28.5		31
21.5"		30.5		29		31.5
22"		31		29.5		32
22.5"		31.5		30		32.5
23"		32		30.5		33
23.5"		32.5		31		33.5
24"		33		31.5		34

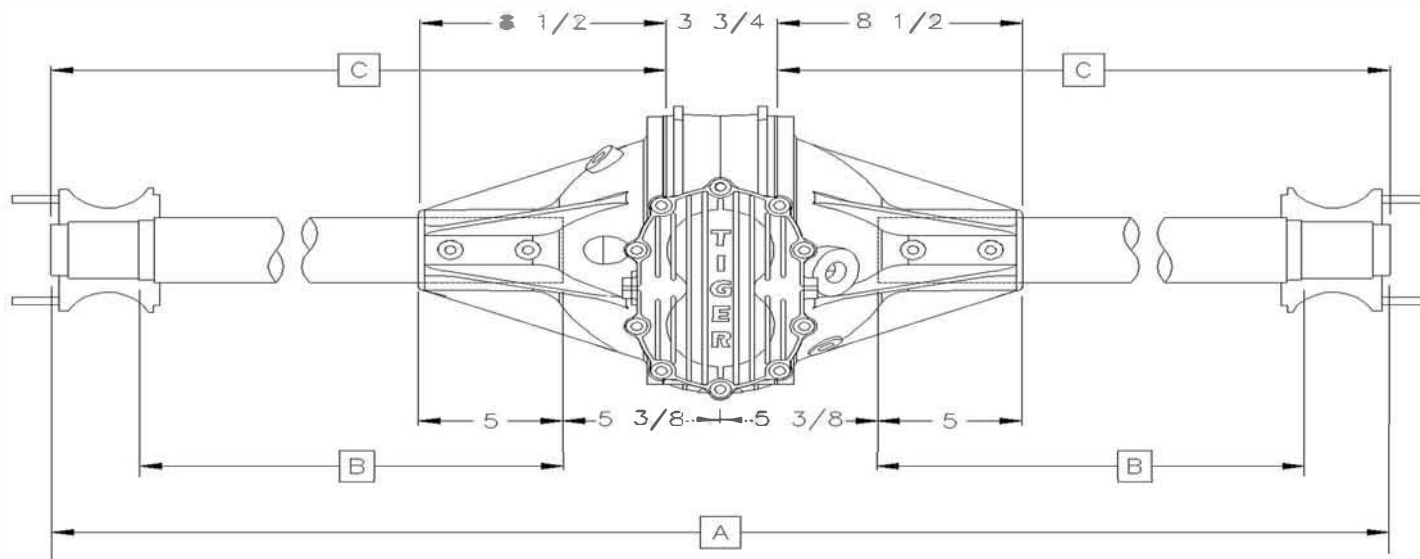
Measurements For Track Width & Off Set



STANDARD WIDE 5, HUBFACE TO HUBFACE

Track Width	Equal Length Tubes		1" Offset Tubes		1-1/2" Offset Tubes		2" Offset Tubes		2-1/2" Offset Tubes		3" Offset Tubes	
	L	R	L	R	L	R	L	R	L	R	L	R
52-1/2	17-3/4	17-3/4	16-3/4	18-3/4	16-1/4	19-1/4	15-3/4	19-3/4	15-1/4	20-1/4	14-3/4	20-3/4
53	18	18	17	19	16-1/2	19-1/2	16	20	15-1/2	20-1/2	15	21
53-1/2	18-1/4	18-1/4	17-1/4	19-1/4	16-3/4	19-3/4	16-1/4	20-1/4	15-3/4	20-3/4	15-1/4	21-1/4
54	18-1/2	18-1/2	17-1/2	19-1/2	17	20	16-1/2	20-1/2	16	21	15-1/2	21-1/2
54-1/2	18-3/4	18-3/4	17-3/4	19-3/4	17-1/4	20-1/4	16-3/4	20-3/4	16-1/4	21-1/4	15-3/4	21-3/4
55	19	19	18	20	17-1/2	20-1/2	17	21	16-1/2	21-1/2	16	22
55-1/2	19-1/4	19-1/4	18-1/4	20-1/4	17-3/4	20-3/4	17-1/4	21-1/4	16-3/4	21-3/4	16-1/4	22-1/4
56	19-1/2	19-1/2	18-1/2	20-1/2	18	21	17-1/2	21-1/2	17	22	16-1/2	22-1/2
56-1/2	19-3/4	19-3/4	18-3/4	20-3/4	18-1/4	21-1/4	17-3/4	21-3/4	17-1/4	22-1/4	16-3/4	22-3/4
57	20	20	19	21	18-1/2	21-1/2	18	22	17-1/2	22-1/2	17	23
57-1/2	20-1/4	20-1/4	19-1/4	21-1/4	18-3/4	21-3/4	18-1/4	22-1/4	17-3/4	22-3/4	17-1/4	23-1/4
58	20-1/2	20-1/2	19-1/2	21-1/2	19	22	18-1/2	22-1/2	18	23	17-1/2	23-1/2
58-1/2	20-3/4	20-3/4	19-3/4	21-3/4	19-1/4	22-1/4	18-3/4	22-3/4	18-1/4	23-1/4	17-3/4	23-3/4
59	21	21	20	22	19-1/2	22-1/2	19	23	18-1/2	23-1/2	18	24
59-1/2	21-1/4	21-1/4	20-1/4	22-1/4	19-3/4	22-3/4	19-1/4	23-1/4	18-3/4	23-3/4	18-1/4	24-1/4
60	21-1/2	21-1/2	20-1/2	22-1/2	20	23	19-1/2	23-1/2	19	24	18-1/2	24-1/2
60-1/2	21-3/4	21-3/4	20-3/4	22-3/4	20-1/4	23-1/4	19-3/4	23-3/4	19-1/4	24-1/4	18-3/4	24-3/4
61	22	22	21	23	20-1/2	23-1/2	20	24	19-1/2	24-1/2	19	25
61-1/2	22-1/4	22-1/4	21-1/4	23-1/4	20-3/4	23-3/4	20-1/4	24-1/4	19-3/4	24-3/4	19-1/4	25-1/4
62	22-1/2	22-1/2	21-1/2	23-1/2	21	24	20-1/2	24-1/2	20	25	19-1/2	25-1/2
62-1/2	22-3/4	22-3/4	21-3/4	23-3/4	21-1/4	24-1/4	20-3/4	24-3/4	20-1/4	25-1/4	19-3/4	25-3/4
63	23	23	22	24	21-1/2	24-1/2	21	25	20-1/2	25-1/2	20	26
63-1/2	23-1/4	23-1/4	22-1/4	24-1/4	21-3/4	24-3/4	21-1/4	25-1/4	20-3/4	25-3/4	20-1/4	26-1/4
64	23-1/2	23-1/2	22-1/2	24-1/2	22	25	21-1/2	25-1/2	21	26	20-1/2	26-1/2
64-1/2	23-3/4	23-3/4	22-3/4	24-3/4	22-1/4	25-1/4	21-3/4	25-3/4	21-1/4	26-1/4	20-3/4	26-3/4
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65-1/2	24-1/4	24-1/4	23-1/4	25-1/4	22-3/4	25-3/4	22-1/4	26-1/4	21-3/4	26-3/4	21-1/4	27-1/4
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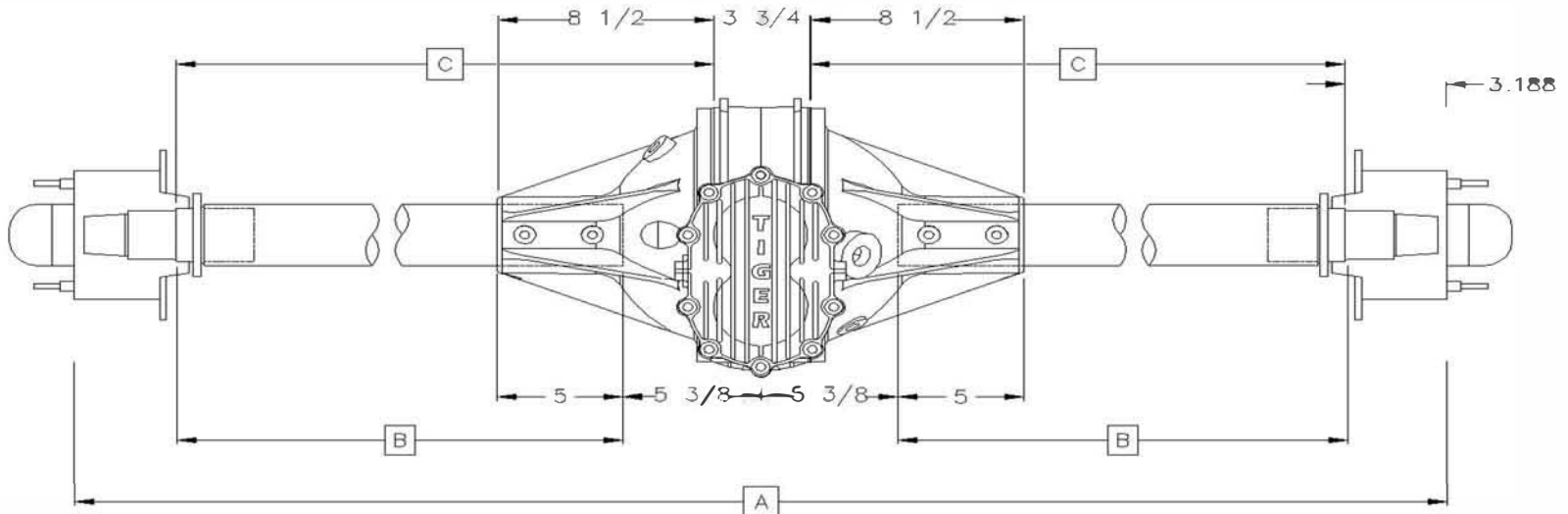
Measurements For Track Width & Off Set



5 X 5 2" PIN HUBFACE TO HUBFACE

Track Width	Equal Length Tubes		1" Offset Tubes		1-1/2" Offset Tubes		2" Offset Tubes		2-1/2" Offset Tubes		3" Offset Tubes	
	L	R	L	R	L	R	L	R	L	R	L	R
52-1/2	18-3/8	18-3/8	17-3/8	19-3/8	16-7/8	19-7/8	16-3/8	20-3/8	15-7/8	20-7/8	15-3/8	21-3/8
53	18-5/8	18-5/8	17-5/8	19-5/8	17-1/8	20-1/8	16-5/8	20-5/8	16-1/8	21-1/8	15-5/8	21-5/8
53-1/2	18-7/8	18-7/8	17-7/8	19-7/8	17-3/8	20-3/8	16-7/8	20-7/8	16-3/8	21-3/8	15-7/8	21-7/8
54	19-1/8	19-1/8	18-1/8	20-1/8	17-5/8	20-5/8	17-1/8	21-1/8	16-5/8	21-5/8	16-1/8	22-1/8
54-1/2	19-3/8	19-3/8	18-3/8	20-3/8	17-7/8	20-7/8	17-3/8	21-3/8	16-7/8	21-7/8	16-3/8	22-3/8
55	19-5/8	19-5/8	18-5/8	20-5/8	18-1/8	21-1/8	17-5/8	21-5/8	17-1/8	22-1/8	16-5/8	22-5/8
55-1/2	19-7/8	19-7/8	18-7/8	20-7/8	18-3/8	21-3/8	17-7/8	21-7/8	17-3/8	22-3/8	16-7/8	22-7/8
56	20-1/8	20-1/8	19-1/8	21-1/8	18-5/8	21-5/8	18-1/8	22-1/8	17-5/8	22-5/8	17-1/8	23-1/8
56-1/2	20-3/8	20-3/8	19-3/8	21-3/8	18-7/8	21-7/8	18-3/8	22-3/8	17-7/8	22-7/8	17-3/8	23-3/8
57	20-5/8	20-5/8	19-5/8	21-5/8	19-1/8	22-1/8	18-5/8	22-5/8	18-1/8	23-1/8	17-5/8	23-5/8
57-1/2	20-7/8	20-7/8	19-7/8	21-7/8	19-3/8	22-3/8	18-7/8	22-7/8	18-3/8	23-3/8	17-7/8	23-7/8
58	21-1/8	21-1/8	20-1/8	22-1/8	19-5/8	22-5/8	19-1/8	23-1/8	18-5/8	23-5/8	18-1/8	24-1/8
58-1/2	21-3/8	21-3/8	20-3/8	22-3/8	19-7/8	22-7/8	19-3/8	23-3/8	18-7/8	23-7/8	18-3/8	24-3/8
59	21-5/8	21-5/8	20-5/8	22-5/8	20-1/8	23-1/8	19-5/8	23-5/8	19-1/8	24-1/8	18-5/8	24-5/8
59-1/2	21-7/8	21-7/8	20-7/8	22-7/8	20-3/8	23-3/8	19-7/8	23-7/8	19-3/8	24-3/8	18-7/8	24-7/8
60	22-1/8	22-1/8	21-1/8	23-1/8	20-5/8	23-5/8	20-1/8	24-1/8	19-5/8	24-5/8	19-1/8	25-1/8
60-1/2	22-3/8	22-3/8	21-3/8	23-3/8	20-7/8	23-7/8	20-3/8	24-3/8	19-7/8	24-7/8	19-3/8	25-3/8
61	22-5/8	22-5/8	21-5/8	23-5/8	21-1/8	24-1/8	20-5/8	24-5/8	20-1/8	25-1/8	19-5/8	25-5/8
61-1/2	22-7/8	22-7/8	21-7/8	23-7/8	21-3/8	24-3/8	20-7/8	24-7/8	20-3/8	25-3/8	19-7/8	25-7/8
62	23-1/8	23-1/8	22-1/8	24-1/8	21-5/8	24-5/8	21-1/8	25-1/8	20-5/8	25-5/8	20-1/8	26-1/8
62-1/2	23-3/8	23-3/8	22-3/8	24-3/8	21-7/8	24-7/8	21-3/8	25-3/8	20-7/8	25-7/8	20-3/8	26-3/8
63	23-5/8	23-5/8	22-5/8	24-5/8	22-1/8	25-1/8	21-5/8	25-5/8	21-1/8	26-1/8	20-5/8	26-5/8
63-1/2	23-7/8	23-7/8	22-7/8	24-7/8	22-3/8	25-3/8	21-7/8	25-7/8	21-3/8	26-3/8	20-7/8	26-7/8
64	24-1/8	24-1/8	23-1/8	25-1/8	22-5/8	25-5/8	22-1/8	26-1/8	21-5/8	26-5/8	21-1/8	27-1/8
64-1/2	24-3/8	24-3/8	23-3/8	25-3/8	22-7/8	25-7/8	22-3/8	26-3/8	21-7/8	26-7/8	21-3/8	27-3/8
65	24-5/8	24-5/8	23-5/8	25-5/8	23-1/8	26-1/8	22-5/8	26-5/8	22-1/8	27-1/8	21-5/8	27-5/8
65-1/2	24-7/8	24-7/8	23-7/8	25-7/8	23-3/8	26-3/8	22-7/8	26-7/8	22-3/8	27-3/8	21-7/8	27-7/8
66	25-1/8	25-1/8	24-1/8	26-1/8	23-5/8	26-5/8	23-1/8	27-1/8	22-5/8	27-5/8	22-1/8	28-1/8

Measurements For Track Width & Off Set



G.N. 2-1/2" PIN HUBFACE TO HUBFACE W/ DRIVE FLANGES

Track Width	Equal Length Tubes		1" Offset Tubes		1-1/2" Offset Tubes		2" Offset Tubes		2-1/2" Offset Tubes		3" Offset Tubes	
	L	R	L	R	L	R	L	R	L	R	L	R
52-1/2	17-3/4	17-3/4	16-3/4	18-3/4	16-1/4	19-1/4	15-3/4	19-3/4	15-1/4	20-1/4	14-3/4	20-3/4
53	18	18	17	19	16-1/2	19-1/2	16	20	15-1/2	20-1/2	15	21
53-1/2	18-1/4	18-1/4	17-1/4	19-1/4	16-3/4	19-3/4	16-1/4	20-1/4	15-3/4	20-3/4	15-1/4	21-1/4
54	18-1/2	18-1/2	17-1/2	19-1/2	17	20	16-1/2	20-1/2	16	21	15-1/2	21-1/2
54-1/2	18-3/4	18-3/4	17-3/4	19-3/4	17-1/4	20-1/4	16-3/4	20-3/4	16-1/4	21-1/4	15-3/4	21-3/4
55	19	19	18	20	17-1/2	20-1/2	17	21	16-1/2	21-1/2	16	22
55-1/2	19-1/4	19-1/4	18-1/4	20-1/4	17-3/4	20-3/4	17-1/4	21-1/4	16-3/4	21-3/4	16-1/4	22-1/4
56	19-1/2	19-1/2	18-1/2	20-1/2	18	21	17-1/2	21-1/2	17	22	16-1/2	22-1/2
56-1/2	19-3/4	19-3/4	18-3/4	20-3/4	18-1/4	21-1/4	17-3/4	21-3/4	17-1/4	22-1/4	16-3/4	22-3/4
57	20	20	19	21	18-1/2	21-1/2	18	22	17-1/2	22-1/2	17	23
57-1/2	20-1/4	20-1/4	19-1/4	21-1/4	18-3/4	21-3/4	18-1/4	22-1/4	17-3/4	22-3/4	17-1/4	23-1/4
58	20-1/2	20-1/2	19-1/2	21-1/2	19	22	18-1/2	22-1/2	18	23	17-1/2	23-1/2
58-1/2	20-3/4	20-3/4	19-3/4	21-3/4	19-1/4	22-1/4	18-3/4	22-3/4	18-1/4	23-1/4	17-3/4	23-3/4
59	21	21	20	22	19-1/2	22-1/2	19	23	18-1/2	23-1/2	18	24
59-1/2	21-1/4	21-1/4	20-1/4	22-1/4	19-3/4	22-3/4	19-1/4	23-1/4	18-3/4	23-3/4	18-1/4	24-1/4
60	21-1/2	21-1/2	20-1/2	22-1/2	20	23	19-1/2	23-1/2	19	24	18-1/2	24-1/2
60-1/2	21-3/4	21-3/4	20-3/4	22-3/4	20-1/4	23-1/4	19-3/4	23-3/4	19-1/4	24-1/4	18-3/4	24-3/4
61	22	22	21	23	20-1/2	23-1/2	20	24	19-1/2	24-1/2	19	25
61-1/2	22-1/4	22-1/4	21-1/4	23-1/4	20-3/4	23-3/4	20-1/4	24-1/4	19-3/4	24-3/4	19-1/4	25-1/4
62	22-1/2	22-1/2	21-1/2	23-1/2	21	24	20-1/2	24-1/2	20	25	19-1/2	25-1/2
62-1/2	22-3/4	22-3/4	21-3/4	23-3/4	21-1/4	24-1/4	20-3/4	24-3/4	20-1/4	25-1/4	19-3/4	25-3/4
63	23	23	22	24	21-1/2	24-1/2	21	25	20-1/2	25-1/2	20	26
63-1/2	23-1/4	23-1/4	22-1/4	24-1/4	21-3/4	24-3/4	21-1/4	25-1/4	20-3/4	25-3/4	20-1/4	26-1/4
64	23-1/2	23-1/2	22-1/2	24-1/2	22	25	21-1/2	25-1/2	21	26	20-1/2	26-1/2
64-1/2	23-3/4	23-3/4	22-3/4	24-3/4	22-1/4	25-1/4	21-3/4	25-3/4	21-1/4	26-1/4	20-3/4	26-3/4
65	24	24	23	25	22-1/2	25-1/2	22	26	21-1/2	26-1/2	21	27
65-1/2	24-1/4	24-1/4	23-1/4	25-1/4	22-3/4	25-3/4	22-1/4	26-1/4	21-3/4	26-3/4	21-1/4	27-1/4
66	24-1/2	24-1/2	23-1/2	25-1/2	23	26	22-1/2	26-1/2	22	27	21-1/2	27-1/2

Quick-Change

REAR END MAINTENANCE PROCEDURES

Compiled by Bob Bolles
Photos Courtesy of Tiger Rear Ends

When the season is over or when something breaks inside your rear end during the season, it is time to disassemble, repair or rebuild, and then reassemble your rear end. There are methods and tools available that will make your job go smoother, with better overall results. These tips may also help prevent costly mistakes.

DISASSEMBLY AND INSPECTION

When disassembling your rear end, make sure you note the condition of all the parts. When draining the rear end grease, run it through a filter to



The bells and center sections are now available in black anodized or plain aluminum or titanium. The black coating reduces retained heat, which is the enemy of bearings, gears, differentials, and so on.

see if there are any telltale metal bits or pieces that may indicate a part failure.

Look over the gear wear pattern as well as the bearing play and any obvious crack in the housing that may only be seen from the inside. Now is the time to decide whether to replace the center section, a right or left bell side, or one of the axle tubes.

CLEANING THE PARTS

After complete disassembly, clean the center section and all of the gears thoroughly. Again, when cleaning, note any strange wear patterns or signs of stress in the housing bearing hangers and so on.

Once all of the parts have been cleaned and inspected, we must select the type of pinion bearing we are to use. There are standard or special low-friction bearings available. These LF types actually reduce rotational friction, and therefore reduce the horsepower needed to turn the rear-end. This increases the power to the rear wheels and would be a good choice based on cost versus benefits.

ASSEMBLE THE PINION

We are now ready to assemble the pinion. We press the new bearing onto the front of the pinion shaft. Add a small amount of anti seize to the threads of the pinion and install the pinion washer and the posi-lock nut by hand. Leave this untorqued for now.

Next, install the nose roller bearing at the rear of the pinion shaft. The pinion is now assembled and ready to be installed into the center section.

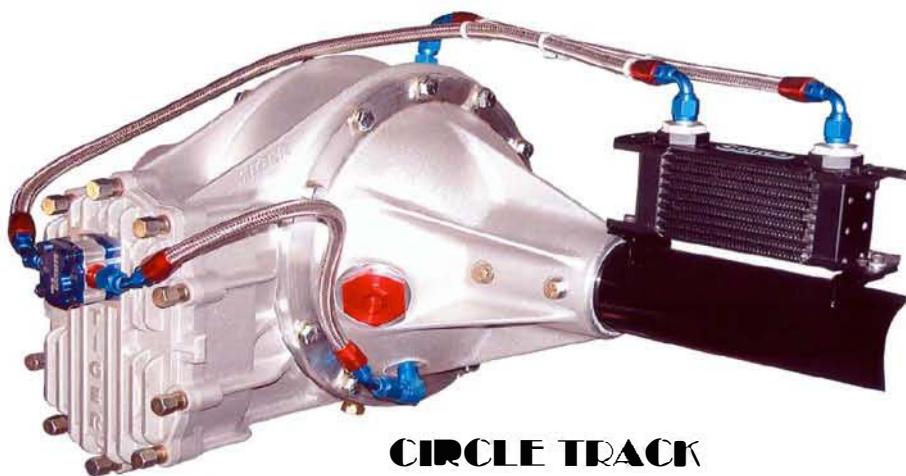
Decide which type of lower shaft or jack shaft, as it is sometimes called, you will use. There are several choices: solid, gun drilled, or the type that is hexed at the rear for a solid or drilled oil pump drive. All of these can be polished. The lower shaft takes two bearings, front lower shaft and rear lower shaft.

It is advised, if space allows, to run the rear end oil pump off the pinion shaft. This slows down the speed of the pump by the same amount as the gear ratio of the rear end. Put the center section in an oven and heat to a temperature of 250 degrees F (not to exceed 300 degree F) for at least 15 minutes. This heats and expands the bearing holes for easy insertion so that after the section cools, the pinion and jack shaft bearings will be held tight. A pair of heavy welder's gloves will be needed when placing the center section into the oven and removing it from the oven.

After it has been sufficiently heated, take the center section out of the oven and lay it on its side. Install the pinion assembly with the nose roller bearing installed on the pinion shaft. Make sure you get the bearings to bottom out in the bearing bores. Because the casing is still hot, the bearings may not seat all of the way, and we want to make sure the bearings are fully seated.

Next, we install the lower shaft and slide the proper front and rear bearing in the lower shaft bearing bores, while again making sure they are fully seated. Now, let the center section sit and cool off.

After cooling, the center section is placed in a vise that has aluminum jaws. Install the rear cover studs if these are being replaced or have been removed on disassembly. At each threaded hole, we push a 5/16-inch steel ball to the bottom of the hole before installing the stud. This is done so that the stud will seat tightly against the ball and not stop at the untapped bottom portion of the threaded hole. Use red Loctite, putting a small amount on the whole thread



CIRCLE TRACK
featured this article in the **April**
2006 issue!

before screwing the studs.

Install the pinion retaining plate. This will involve using three locking tabs, and six 3/8x16x1-inch bolts. Use anti seize on all of the bolts and torque them to 35 ft.-lb. Do not use Loctite here because you will bend the locking tabs over the bolt heads to secure them. The retaining plate also holds the rear lower shaft bearing in place.

Next, torque the pinion nut. The reason we installed the cover studs first, is because they will hold the special Tiger designed pinion torque tool. This tool holds the nut as we turn the pinion shaft from the rear to a torque of 150 ft.-lb for the low-friction bearings, or 25lb/in. rotational resistance for the standard Timken bearings. Now, install the posi-lock cap over the pinion nut. This keeps the pinion nut from backing off.

Next, install the yoke spacer onto the lower shaft to prevent the yoke from pressing on the seal and eventually ruining it.

A yoke seal is then installed in the seal plate and held in place by a new retaining ring. Install the O-ring in the groove and attach the aluminum seal plate to the front. Fasten this plate using six cat washers and six 3/8x16x1 1/4-inch bolts. Before tightening the plate, place a small amount of oil on the yoke surface and slide the drive yoke into the seal.

Apply blue Loctite to the bolts and then torque them to 35ft.-lb. With the drive yoke in place, put a small bead of silicone around the end of the lower shaft and the front edge of the yoke. This serves to seal between the spline grooves to prevent oil leakage. Then, the 3/8x24x1 1/4-inch bolt and drive yoke retaining washer are installed and torqued to 55 ft.-lb.



Special tools are used to press the bearings onto the pinion shaft. These ensure that the bearing goes on straight and is properly seated.



The pinion nut is held in place using a special tool that is held by the cover studs. Then, the pinion shaft is rotated to obtain the proper torque on the nut.

You will need to decide which type of differential to use. There are many choices available, and no matter which one you end up with, the process of the build is the same. Let's just say we are going to use a spool, by far the cheapest of all and the most common.

We are ready to install our ring gear onto the differential, in this case the spool. We hand-prepare the surface (using a fine emery cloth, sandpaper, or a honing stone) on the back of the ring gear. Clean the area thoroughly after preparation. The ring gear is threaded for 12 bolts. Red Loctite is applied to the threads in the ring gear holes before inserting the ring gear bolts. Applying Loctite to the holes instead of the bolts, prevents the possibility of Loctite seeping onto the surface of the ring gear between the gear and the differential. If anything gets between these two parts, the gear will not run true to the pinion and there will be trouble. Torque the ring gear bolts using a crossing pattern in three steps: first to



This little tool holds the jackshaft while you tighten and torque the yoke nut.

35-ft.-lb, then to 45ft.-lb, and finally to 55 ft.-lb.

Now we can put our bells and axle tubes together. All tubes should be scribed so that they will be installed correctly. When using cambered tubes, it is critical to line up the tubes properly to prevent rotation, which will create unwanted toe in the rear wheels. This is very important to get right.

If you are going to run the tube seals, this is the time to install them into the axle tubes. Push them out toward the snout end so they will not be near the bell end of the axle tube as it is inserted into the hot bell.

The assembly of the bells is fairly simple. You have a left and a right side bell. Each bell is scribed with a 0-degree and 2-degree mark. Again, the heavy welder's gloves are needed. Place the bells into the oven and heat to 250 degrees F for 15 minutes. Once they are up to temperature, take one out, noting left from right. Make sure you put the left axle tube in the left bell and the right axle tube in the right bell while making sure the alignment marks are in line.

When using cambered axle tubes, the snouts are of an opposite angle side to side. Accidentally reversing the tubes would reverse the intended camber angle. A negative 1.5-degree tube properly mounted on the right side would still be negative 1.5-degree snout when mounted on the left side, where we really need the left side to be a positive camber.

After a few seconds of cooling, the tubes will become firmly married to the bells. At this point, turn the axle tube and bell assembly over and install the new bearing race into the bell, making sure they are fully seated. Then let the entire assembly cool.

If we have a new bell or axle tubes, we can drill and tap the bells and tubes to permanently attach them. We will be using 3/8x24x1 inch bolts for this. Now is the time to push the tube seals back into the tube toward the bell end. Upon completion, we will make sure the seal is between the two sets of axle tube bolts.

After the holes are drilled and tapped, and the edges of the holes are cleaned up, push the seal all the way back to the bell end of the tube. Install the outer bolts (the ones toward the snout) using red Loctite, and then slide the tube seal out against the outer bolts while you install the three inner bolts, adding a small amount of red Loctite. Torque them all to 35ft.-lb. Now the tube seal is sandwiched between the two sets of bolts, keeping the seal from moving in or out in the tube.

Let the left tube and bell stand on end with the tube snout down. We thread it into our specially made stand built to hold the axle tube. The tube goes into this threaded collar while it is mounted and welded to a steel wheel. Now we have a base we can use to finish building the rear end. Some of the most critical steps are coming up.

We now have the left bell on the bottom with the differential bearing race facing up. Install the wear pad in the machined bore in the left bell and run it all of the way out for now. We are going to work on getting the lash and crush spacing correctly set. The lash is the spacing between the pinion gear and the ring gear, and the crush is the preload on the differential bearings.

This is a very important step. This part of the build may take the most time because you may have to press bearings on and off as well as add and subtract shims to get the right numbers. One trick is using setup bearings. These are temporary bearings that have been lightly honed and enlarged on the inside surface so they will slide easily over the spool. The final assembly will require pressing on new bearings.

As a starting point, we begin with a 0.020-0.025-inch stack of shims on the bottom of the spool behind the bearing, and then slide on a setup bearing. Now we will set the spool in the left bell, leaving the bell O-ring seals out until final assembly.

We will place our center section onto the left bell. While pressing down hard onto the spool, centered on the tapered bearing race, and holding the pinion still, turn the spool back and forth to estimate the lash. We want to feel around 0.010-inch or so of lash between the pinion and the ring gear. If it is too tight or too loose, you would add or remove shims from the stack on the spool setup bearing until you get it close.



Spacer shims are placed between the center section and the right bell to adjust for crush clearance. This is a trial-and-error way to obtain the correct shim spacing behind the differential bearing to arrive at 0.010-inch crush when tightening the bell to the center section.



Note the special stand that holds the axle tube. The snout is screwed into the stand. Using the tool puts the part within easy reach. You can build one of these at your shop.

It is now time to place shims onto the top of the spool and under the bearing. Adding shims equaling about 0.060-inch will put you close. Now, slip your other setup bearing on the spool.

Place the right bell and tube over the spool and set it on the center section. If the bell fits on the spool bearing without rocking, you will need to add more shims to the top. We want the bell to end up approximately 0.010-inch off the center section before we tighten the center section bolts.

To get there, start out by placing 0.010 inch of shims at equal spacing in three places around and between the center section and bell. If you can, press down on the tube and bell with the shims in place without it rocking, we may need to add (and not remove) internal shims to achieve 0.010-inch crush spacing.

Add or remove shim spacing under the bell until the bell starts to rock. Then, add or remove small increments of the shims until there is no rocking and the shims fit the gap like a feeler gauge. Measure the final thickness of the bell shims and find the difference between their thickness and 0.010-inch. If the bell spacer shims are more than 0.010-inch,



Once the rearend has been bolted together and re-checked for gear lash, a final adjustment might be needed. That means the carrier bearings must be pulled. This tool pulls the pressed-on bearings without causing damage.

remove that difference from the shims behind the spool bearing to lower the bell to a 0.010-inch gap. If the bell spacer shims are less than 0.010-inch, add the difference to the shims behind the spool bearing to bring the gap up to 0.010-inch.

Once we have installed the correct amount of crush shims, we will check the gear lash. For backlash, we will tighten the right bell to the center section and use a lash tool attached to the pinion shaft. We need to see 0.010-0.012-inch of lash as we rotate the pinion gear against the ring gear. To adjust this lash, we will be moving small amounts of the spool bearing shim stack from the right to the left if the last is too little, or from the left to right if the lash is too much.

We can now install our dial indicator to check the pinion-to-ring gear lash. The tool mounts onto one of the cover studs, and we slide a Tiger flag tool onto the pinion shaft. We can check the lash to the thousandths by rocking the pinion shaft back and forth, making sure to check the lash in several different places on the pinion gear. This means we check the lash in one position, then rotate the pinion shaft 90 degrees and do it again, all the way through 360 degrees.

This is a trial-and-error method that can take some time, but it is essential for optimum performance. Once we have arrived at the correct shim spacing, we will press the new differential bearings onto the spool,

leaving the shim stacks as they ended up. We will go back and reassemble the bells and center section and do the lash measurement process all over again.

Most of the time it will come out the same, but if not, we may have to make a final fine adjustment by adjusting the shim spacing. Be sure to use a special bearing puller tool if you need to remove a pressed-on bearing to prevent damage to the bearing.

For final assembly, unbolt the rear, remove the right bell and center sections, and place the bell O-rings in their grooves, beginning with the left bell. We need to use a light film of silicone around the mating surface of both of the bells and center section. Place two of the center section bolts into the center section and slide the center section down onto the left bell. Press the center section down, then take the two bolts out and place them in the right bell.



We use the center section bolts to guide the bell into place. With the O-rings in place, mismatching the bell to center section might cause leaking later on.

Now slide the right bell over the center section, using the bolts to line it up. Install the 10 through bolts and two stud bolts and torque them all to 40 ft.-lb using the crossing pattern.

As a final step, we will adjust the wear pad we installed in the left bell. Screw in the wear pad, or thrust block as it is also called, until it just barely touches the back of the ring gear, and back it off one-eighth of a turn. This should equal between 0.010-0.015-inch of clearance. This pad supports the ring gear on the back side of the rear end (opposite the pinion gear) if the front of the ring gear tries to move away from the pinion gear.

Install the rear end and fill it with rear end lubricant, checking for leaks. By using proper assembly techniques and quality parts, your racing rear end should provide many races of reliable performance before your next overhaul. If you are using a locker differential or one of the traction-sensing diffs, keep the heat in the rear end down by using a rear end cooler during long runs. Just as in brakes, heat is the enemy for rear ends.



Another unique tool is this pinion flag tool. It is specially designed to provide a surface on which to rest the dial indicator while checking for gear backlash. The distance from the center of the pinion shaft to the point where the indicator lies is the same as the distance to where the gears mesh. This way you get a true lash measurement, just as if you had measured between the actual gear teeth.

Here are the answers to our customer's most common questions...

Q. What type of oil do Tiger Rear Ends run?

A. At Tiger, we recommend Tiger H.P. synthetic 75/90 gear oil. However, some other synthetic oils will work.

Q. How much oil do I put in my Tiger Rear End?

A. DO NOT OVER FILL- There is an inspection plug located on the right side of the bell. Fill it with the recommended oil to the bottom of the inspection hole.

Q. How often do I change the oil in my Tiger Rear End?

A. Tiger Quick Change recommends that you change the oil in your rear end between 200-300 laps.

Q. How often do I change the locker springs?

A. This is determined by which springs you are using.
PURPLE SPRINGS - Every 4 to 5 races
YELLOW SPRINGS - Every 3 to 4 races

Q. When do you know that it is time to come in for a rebuild?

A. We suggest that after a full race season you change seals, check bearings, and backlash along with clearance in the rear end.

TIGER HIGH PERFORMANCE SYNTHETIC GEAR OIL

Tiger's High Performance Gear Oil is a heavy-duty, extreme pressure gear lubricant compounded in a fully synthetic base. In addition to reducing friction and wear caused by extreme temperature, Tiger's HP Rear End Oil contains additives that prevent rust, oxidation, and corrosion from occurring as well as an anti foaming agent to maintain the top performance and extend the life of your Quick Change.

Tiger Synthetic HP rear End Oil is compatible with standard seal materials as well as mineral oil based products. No special system or flushing procedure is required to convert to Tiger Synthetic HP Rear End Oil.



TG-5200
5 GALLON



TG-5201
1 GALLON