

*Winters*



*Rear Ends*

# CONTENTS

## ORDER POLICY

- Know your customer number.
- Order by part number. Winters will not be responsible for incorrect orders placed by description only.
- Specify shipping instructions - otherwise use our discretion.
- Refused orders will have a \$25.00 handling charge and applicable freight charges billed to the customers account.
- Special orders can not be cancelled after the order is in process.

## RETURN POLICY

**IMPORTANT:** All returns must include a Return Authorization Number (RA#). The issuance of an RA# does not constitute a guarantee of credit or replacement. Credit, refund or replacement will only be issued after an inspection and determination at our discretion. No returns are accepted on special order, obsolete, damaged, used or altered merchandise.

### ALL RETURNED MERCHANDISE MUST INCLUDE:

- RA# clearly written on outside of box as well as:
  - Customer number, name and phone number
  - Copy of invoice
  - Written explanation for cause of return
  - Whether return is for replacement, credit or refund
- Returned merchandise is subject to the following restocking fees (except sellers error):
  - 1-90 days = 15%
  - 91 days - 6 months = 25%
  - **NO RETURNS AFTER 6 MONTHS**
- Returns must be freight pre-paid (except sellers error).
- Returned parts must be packaged properly to avoid damage.
- Shipping damages must be reported immediately to your carrier.
- Shortage claims must be reported immediately.
- Save your cartons.

### Catalog Cover Car

1932 Ford Tudor Sedan built by Johnson's Hot Rod Shop in Gadsden, Alabama, for George Poteet of Memphis, Tennessee.

## WINTERS PERFORMANCE PRODUCTS, INC.

1580 Trolley Road York, PA 17408 USA

P: 717-764-9844 F: 717-764-0617

[www.wintersperformance.com](http://www.wintersperformance.com)

**Hours: Monday - Friday 8:30 AM - 5:30 PM EST**

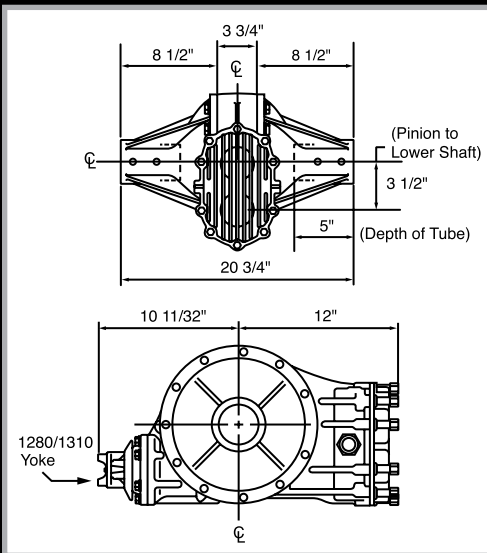
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**TRADITIONAL  
HOT RODDING  
WITH ALL THE LATEST  
TECHNOLOGY**

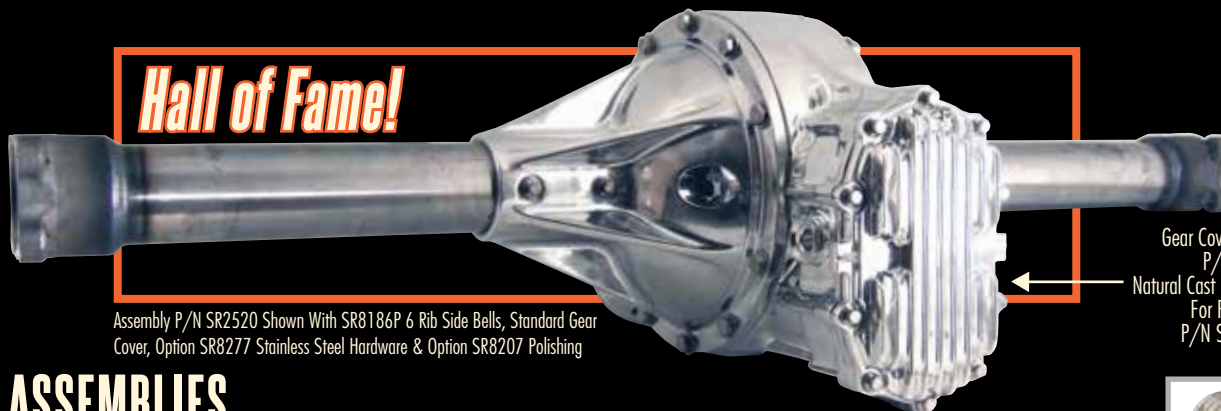
# CHAMPIONSHIP

**QUICK CHANGE**



More than tradition, our Championship Quick Change Rear features our Sprint Car Center with a 10", 4.12 Ring & Pinion, Heat Treated Lower Shaft, Winters Track Differential (see page 5), Axle Seals and your choice of a 10 Spline, Straight Cut Gear Set. Housing ends accept stock appearing Flanged 31 Spline Axles (sold separately) that will accommodate after-market disc or stock brakes.

# Hall of Fame!



Assembly P/N SR2520 Shown With SR8186P 6 Rib Side Bells, Standard Gear Cover, Option SR8277 Stainless Steel Hardware & Option SR8207 Polishing

Gear Cover Sold Separate  
P/N SR6508  
Natural Cast Finned With Bearings  
For Polishing Add  
P/N SR8207-6508

## ASSEMBLIES

- SR2520** Big Bearing Flanged Axle  
**SR2525** Big Bearing Flanged Axle (Torino®)  
**Blacked Out Skull & Cross Bones Assembly**  
**SR2520SC** Big Bearing Flanged Axle  
**SR2525SC** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207** Polishing  
**SR8211CF** Billet Gear Cover  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series  
**SR8277** Stainless Steel Hardware  
**SR9134** Gear Cover

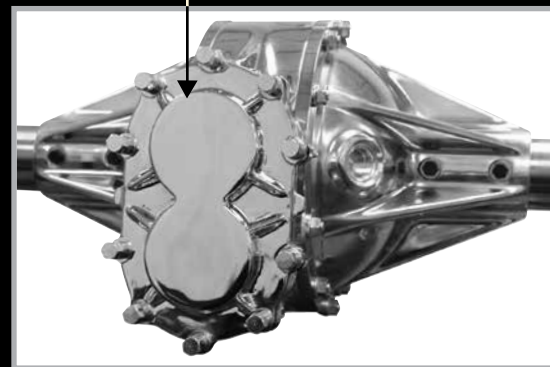
See Pages 38-39 For Optional Gear Covers

See Pages 44-45 for Exploded View  
and Parts List. See Page 83 for Axle  
Ordering & Housing Info

Gear Cover Sold Separate  
P/N SR12738  
Natural Cast Cover With Bearings  
For Polishing Add  
P/N SR8207-12738



**SR9341**  
Vent Fitting  
3/8 - 24 x 1/2 Stainless



Assembly P/N SR2525SC Shown With SR 8186P 6 Rib Side Bells,  
SR 9134 Gear Cover, & Option SR8207 Polishing

## ALL THE OPTIONS YOU WANT



Assembly P/N SR2520 Shown With  
SR8186P 6 Rib Side Bells, Option  
SR8211CF Gear Cover & Option  
SR8207 Polishing



Assembly P/N SR2520 shown  
with SR8136 4 Rib Side Bells,  
Option SR8211 Billet Gear Cover  
& Option SR8207 Polishing



### P/N SR6513-31

Our 31 Spline Winters Track Differential is standard  
equipment in all Championship Assemblies.  
CNC machined to exacting tolerances.

**Race Proven Gear Design** Automatically Senses  
Wheel Spin And Delivers Positive Traction





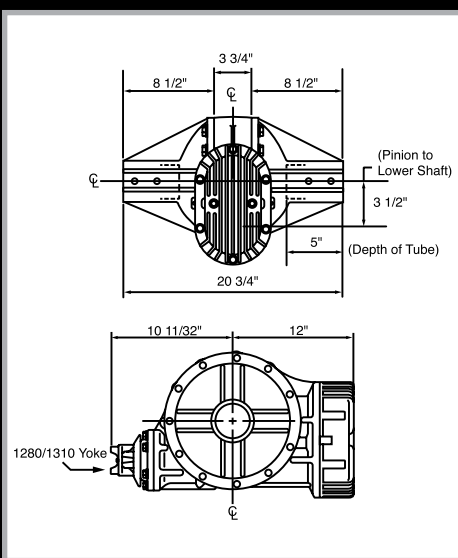
4



**WORLDS  
FINEST  
REAR ENDS**

# CHAMPIONSHIP

## HEAVY DUTY



Maximum exposure might best describe our Championship Heavy Duty Quick Change Rear. This rear features our Heavy Duty Center with a 10" 4.12 Ring & Pinion, Deep Dish Style Gear Cover, Heat Treated Lower Shaft, Winters Track Differential, Axle Seals and your choice of a 10 Spline, Straight Cut Gear Set. Housing ends accept stock appearing Flanged 31 Spline Axles (sold separately) that will accommodate after-market disc or stock brakes.

✓ **Yes, Sign Me Up!**



Assembly P/N SR2520HD shown with SR8155 8 Rib Side Bells, Standard Deep Dish Gear Cover & Option SR8207-HD Polishing

Gear Cover Sold Separate  
P/N SR5054 HD  
Natural Cast Finned Cover  
With Bearings  
For Polishing Add  
P/N SR8207-5054

See Pages 46-47 for Exploded View and Parts List

## ASSEMBLIES

**SR2520HD** Big Bearing Flanged Axle  
**SR2525HD** Big Bearing Flanged Axle (Torino®)  
Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

## POPULAR OPTIONS

**SR2980** Axle Set  
**SR8106V** Lower Shaft, Vascomax® 10 Spline  
**SR8106V-32** Lower Shaft, Vascomax® 32 Spline  
**SR8207-HD** Polishing  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series

## WINTERS TRACK

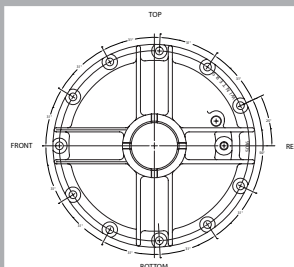


### P/N SR6513-31

Our 31 Spline Winters Track Differential is standard equipment in all Championship Heavy Duty Assemblies. CNC machined to exacting tolerances. This virtually unbreekable, parallel gear design automatically senses wheel spin and delivers positive traction.



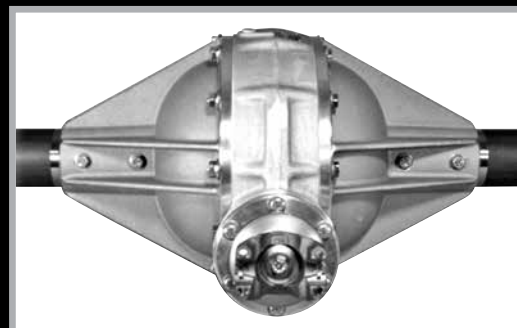
### 10" BELL BOLT CIRCLE



The bolt circle for a Full Size 10" Bell is 11 on 11.532"



Use Winters Semi-Synthetic Lube with Moly 80-90-140  
**P/N SR1730**



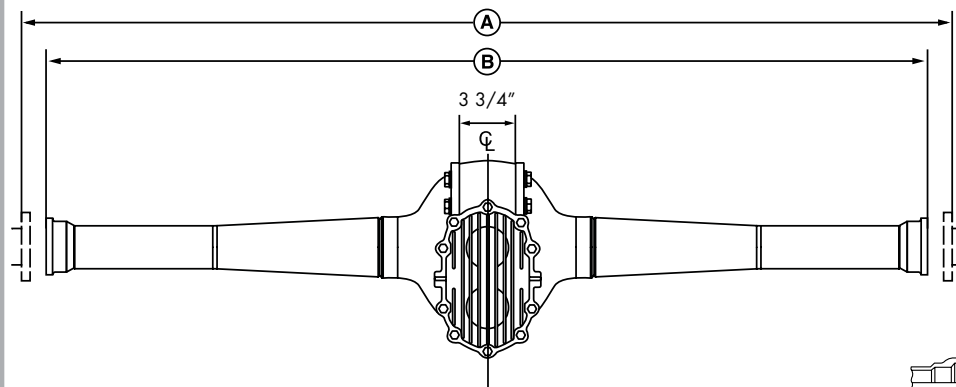
Assembly P/N SR2520 shown with SR8155 8 Rib Side Bells (4 & 6 Rib also available) & Standard 1310 Series Yoke.

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# HOT ROD HISTORY

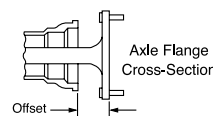
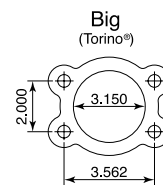
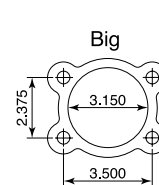
# CHAMPIONSHIP TAPERED STEEL TUBE & BELL

Legendary styling and cutting edge technology has never been better! Winters nostalgic Championship Tapered Steel Tube & Bell Quick Change Rear comes built to your specs. This assembly includes a 10" ground Ring & Pinion, Heat Treated Lower Shaft, Winters Track Differential, Axle Seals, and your choice of a 10 Spline Straight Cut Quick Change Gear Set. Specifically for big horsepower cars, this assembly uses stock appearing Flanged 31 Spline Axles that will accommodate after-market disc or drum brakes.



**A** Axle Flange to Axle Flange  
56" Standard

**B** Housing Flange to Housing Flange  
51" Standard



| DESCRIPTION               | OFFSET |
|---------------------------|--------|
| Big Bearing Ford          | 2.36"  |
| Big Bearing Ford          | 2.50"  |
| Big Bearing Ford (Torino) | 2.50"  |



Assembly P/N SR2535STB shown with SR9134 Gear Cover, Option SR8207CSTB Polishing & Option SR8277 Stainless Steel Hardware.

See Pages 48-49 for Exploded View and Parts List

Gear Cover Sold Separate  
P/N SR12738  
Natural Cast Cover With Bearings  
For Polishing Add  
P/N SR8207-12738

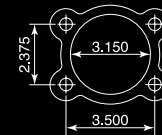
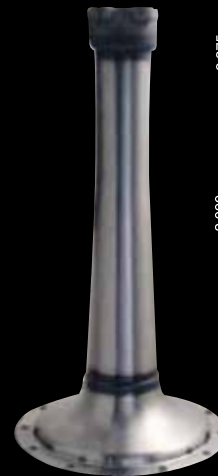
## ASSEMBLIES

- SR2530STB** Big Bearing Flanged Axle  
**SR2535STB** Big Bearing Flanged Axle (Torino®)  
Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

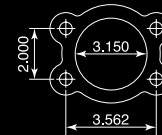
## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207CSTB** Polishing  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series  
**SR8277** Stainless Steel Hardware  
**SR9134** Gear Cover

## WINTERS STEEL TUBE & BELL



- SR4910C**  
Steel Tube & Bell with Big Bearing



- SR4915C**  
Steel Tube & Bell with Big Bearing (Torino®)

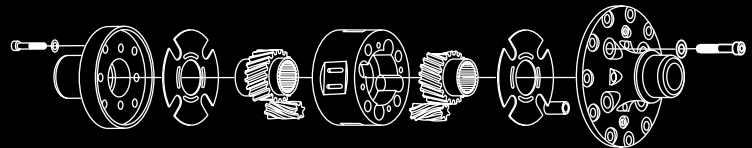


- P/N SR12460**  
Steel Tube & Bell Tube Seal

## WINTERS TRACK



- P/N SR2419**  
Our 31 Spline Winters Track Differential is standard equipment in all Championship Tapered Steel Tube & Bell Assemblies.

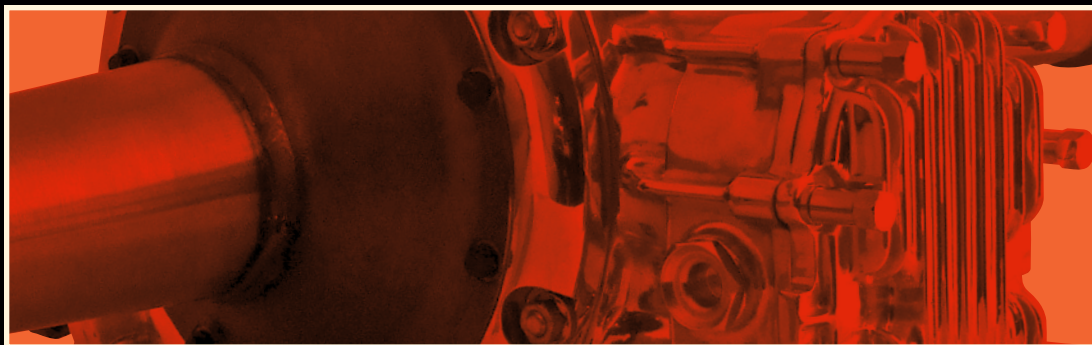


**Race Proven Gear Design**  
Automatically Senses Wheel Spin And Delivers Positive Traction



# CHAMP ADAPTER

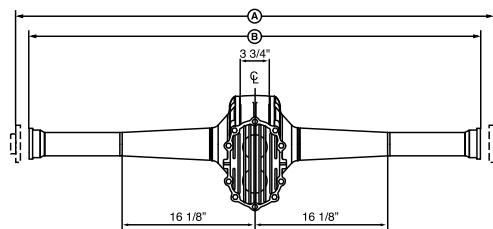
8



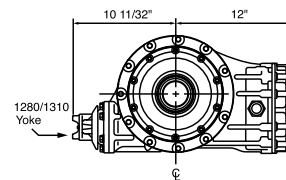
## STEEL TUBE & BELL

Better than the original, Winters Forged Steel Tube & Bell Champ Adapter Quick Change Rear End is Built to your specs, Featuring our Sprint Car Center with a 10", 4.12 Ring & Pinion, Heat Treated Lower Shaft, Winters Track Differential, Axle Seals and your choice of a 10 Spline, Straight Cut Gear Set.

## CUSTOM SHOP



**A**  
Axle Flange to Axle Flange 56" Standard



**B**  
Housing Flange to Housing Flange 51" Standard

# Car Art!



Assembly P/N SR2520STB shown with Option SR8207-CA Polishing

## ASSEMBLIES

- SR2520STB** Big Bearing Flanged Axle  
**SR2525STB** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207-CA** Polishing  
**SR8211CF** Billet Gear Cover  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series  
**SR8277** Stainless Steel Hardware

See Pages 38-39 For Optional Gear Covers

## WINTERS TRACK



### P/N SR2419

Our 31 Spline Winters Track Differential is standard equipment in all Steel Tube & Bell Champ Adapter Assemblies. If purchased separately, it must be used with P/N SR2493-01 Champ Adapter Bells.



### Race Proven Gear Design

Automatically Senses Wheel Spin And Delivers Positive Traction

P/N SR2493-01 Champ Adapter Bell. For use with Winters Steel Tube & Bell. Must be used with Winters Track P/N SR2419.

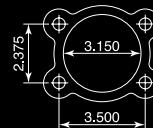
P/N SR2493 Champ Adapter Bell. For use with original early Ford® Steel Tube & Bell. Must be used with Winters Track P/N SR2419.

See Pages 50-51 for Exploded View and Parts List



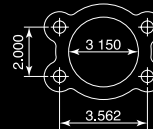
Assembly P/N SR2520STB shown Polished Gear Cover, Polished Side Bells and Cast Center.

## WINTERS STEEL TUBE & BELL



### P/N SR4900

Steel Tube & Bell with Big Bearing



### P/N SR4905

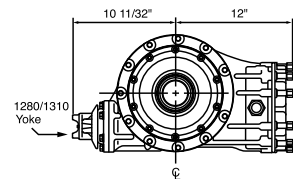
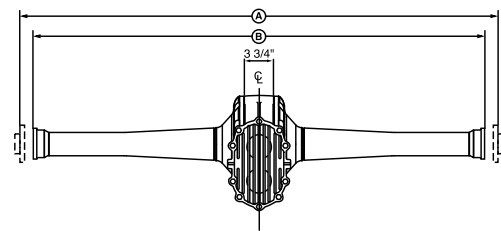
Steel Tube & Bell with Big Bearing (Torino®)



### P/N SR12460

Steel Tube & Bell Tube Seal

# 10 CHAMP ADAPTER FABULOUS REAR ENDS HIGH PERFORMANCE



| A   |
|---|
| Axle Flange to Axle Flange 56" Standard       |
| B   |
| Housing Flange to Housing Flange 51" Standard |

Ideal for big horsepower cars, this combination adapts Original Early Ford® Style Steel Tubes and Bells to our full size Championship Quick Change Rear. This assembly includes a Winters Track Differential designed specifically for this application, Heat Treated Lower Shaft and a 10 Spline, Straight Cut Gear Set of your choice.



Assembly P/N SR3600 shown with  
Option SR8207 Polishing

## Put A Real Hot Rod Rear In Your Hot Rod!

See Pages 50-51 for Exploded View and Parts List



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

## ASSEMBLIES

**SR3600** Sprint Center with Champ Adapter Bells

## POPULAR OPTIONS

**SR8207-CA** Polishing  
**SR8211** Billet Gear Cover  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series

See Pages 38-39 For Optional Gear Covers



P/N SR3600 shown with Classic Axle Tubes (not included),  
Standard Gear Cover & Option SR8207 Polishing.

## WINTERS TRACK



### P/N SR2419

Our 31 Spline Winters Track Differential is standard equipment in all Champ Adapter Assemblies. If purchased separately, it must be used with P/N SR2493 Champ Adapter Bells.



### Race Proven Gear Design

Automatically Senses Wheel Spin And Delivers Positive Traction



P/N SR2493-01 Champ Adapter Bell. For use with Winters Steel Tube & Bell. Must be used with Winters Track P/N SR2419.

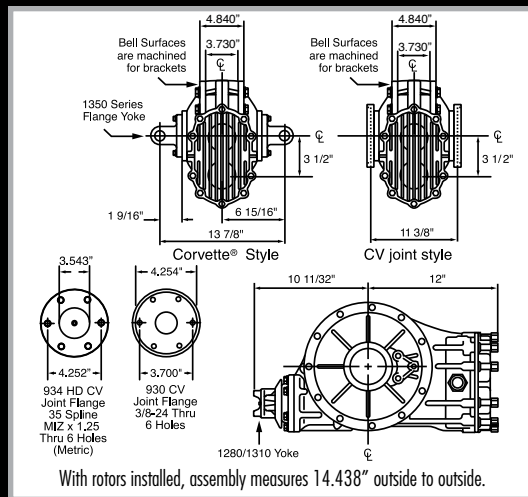
P/N SR2493 Champ Adapter Bell. For use with original early Ford® Steel Tube & Bell. Must be used with Winters Track P/N SR2419.



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What happens when you cross an Independent Rear with a Quick Change? The Most Advanced Independent Quick Change Available! This assembly includes a 10", 4.12 Ring & Pinion, Heat Treated Lower Shaft, Winters Track Differential, Caliper Mount Side Bells, Roller Support Bearing Upgrade, Pinion Lock Nut Assembly, 1350 Series Flange Yoke and your choice of a 10 Spline, Straight Cut Gear Set.

# CHAMPIONSHIP



## INDEPENDENT

THE MOST  
ADVANCED  
INDEPENDENT  
QUICK CHANGE  
AVAILABLE



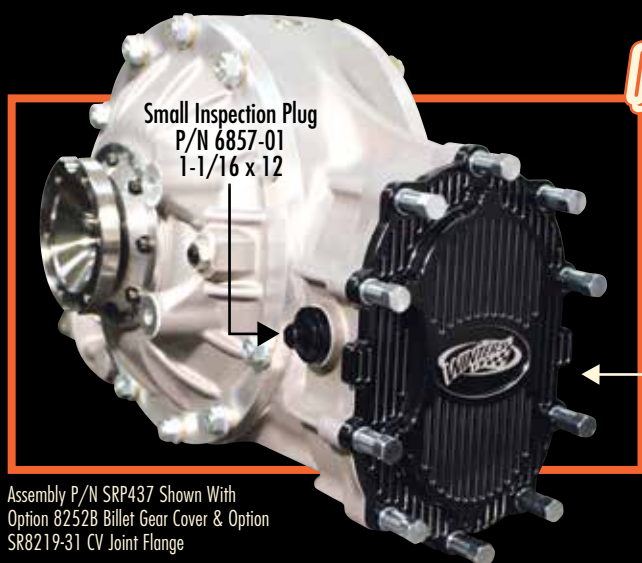
**Assembly P/N SRP437**

®Corvette Style shown with Standard Gear Cover  
& Option SR8207 Polishing.

# Quality...Plain & Simple!

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See Pages 52-53 for Exploded View and Parts List



Assembly P/N SRP437 Shown With  
Option 8252B Billet Gear Cover & Option  
SR8219-31 CV Joint Flange

Gear Cover  
Sold Separate  
P/N SR4873  
O'Ringed Billet Big  
Bearing Aluminum  
Finned Cover With  
Internal Big Retainers

## ASSEMBLIES

**SRP437**

**SRP437NQ**

**SRP337**

**SRP337NQ**

10" Independent w/Winters Track Diff

10" Non-Quick Change w/Winters Track Diff

10" Independent w/Aluminum Spool

10" Non-Quick Change w/Aluminum Spool

## OPTIONS

**SR8133-10-6**

**SR8106V**

**SR8106V-32**

**SR8115-31HD**

**SR8115-35HD**

**SR8207**

**SR8219-31**

**SR8219-35**

**SR8252B**

**SR8275-1**

**SR9154-35**

6 Bolt Cover

Lower Shaft, Vascomax® 10 Spline

Lower Shaft, Vascomax® 32 Spline

Aluminum Spool HD w/ Splined Steel Insert, 31 Spline

Aluminum Spool HD w/ Splined Steel Insert, 35 Spline

Polishing

CV Joint Flange 930, 31 Spline, Porsche®

CV Joint Flange 930, 35 Spline

Billet Gear Cover With Retainers

Yoke, 1350 Series

CV Joint Flange 934, 35 Spline, HD



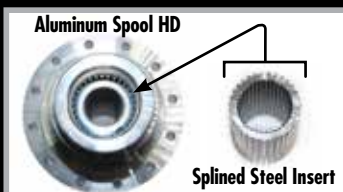
Assembly shown with Option SR8133-10-6 6 Bolt Cover & Option SR8219-31  
or SR8219-35 CV Joint Flange.



Non-Quick Change Independent Assembly P/N SRP437NQ ©Corvette Style shown.



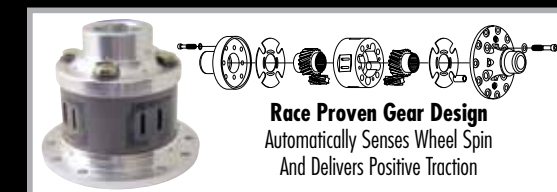
Aluminum Spool  
P/N SR3353-31 (31 Spline)  
P/N SR3353-35 (35 Spline)



Aluminum Spool HD w/ Splined Steel Insert  
P/N SR3353-31HD (31 Spline)  
P/N SR3353-35HD (35 Spline)

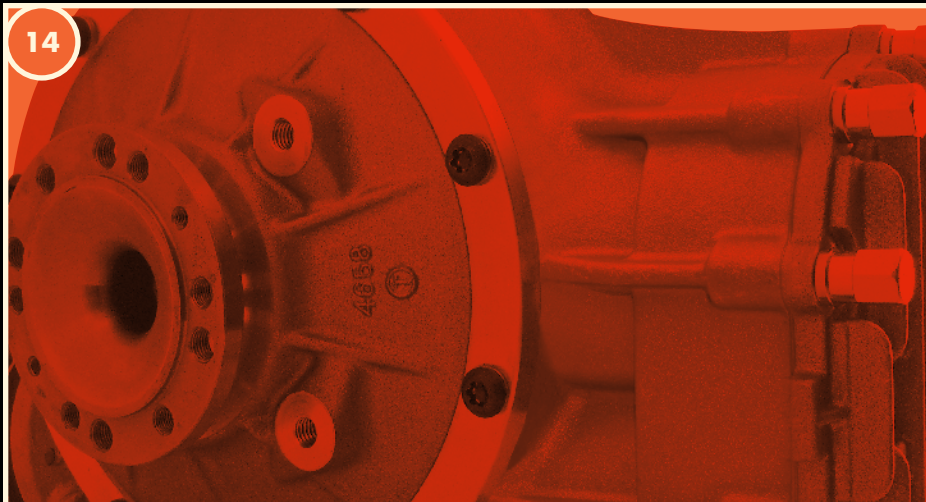


CV Joint Flange 930  
P/N SR2944-31 Output Flange (31 Spline) 930  
P/N SR2944-35 Output Flange (35 Spline) 930



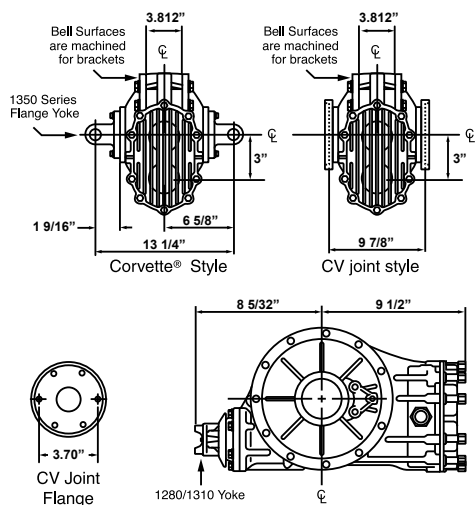
Winters Track Diff  
P/N SR2418-31 (31 Spline)  
P/N SR2418-35 (35 Spline)

14



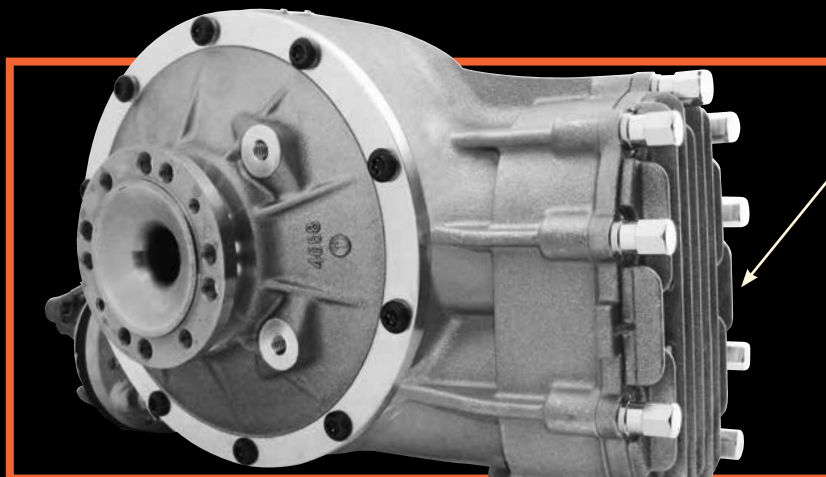
# BUILT FROM SCRATCH

# V8 INDEPENDENT



A V8 version of our Independent Quick Change.

This assembly includes a 8 3/8", 3.78 Ring & Pinion,  
Heat Treated Lower Shaft, Winters Wedgelock  
Differential, Caliper Mount Side Bells, Support Bearing  
Upgrade, Pinion Lock Nut Assembly and your choice of  
a 6 Spline, Straight Cut Gear Set.



Assembly P/N SRP437-838 shown in Natural Cast  
with Standard Straight Finned Gear Cover

Gear Cover Sold Separate  
P/N SR3225  
Natural Cast Finned Cover  
For Polishing Add  
P/N SR8207-3225

See Pages 54-55 for Exploded  
View and Parts List



Steel 1310 Series  
Flang Yoke  
P/N 3702



Aluminum 1310 Series  
Flang Yoke  
P/N 3453-01



UBolt 1310 Series  
Flang Yoke  
P/N 4862

## ASSEMBLIES

**SRP437-838** 8 3/8" w/Wedgelock  
**SRP437-838NQ** 8 3/8" Non-Quick Change

## POPULAR OPTIONS

**SR8207** Polishing  
**SR8211** Billet Gear Cover  
**SR8247** Helical Gear (Specify Ratio)  
**SR8275-1** Yoke, 1350 Series  
**SR9132** Polished Gear Cover Only  
**SR9134** Natural Cast Gear Cover

See Pages 38-39 For Optional Gear Covers

Option SR9134



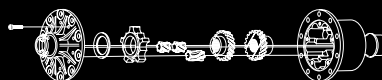
Gear Cover Sold Separate  
P/N SR12350 Natural Cast Cover With  
Bearings For Polishing Add  
P/N SR8207-12350

## WEDGELOCK



### P/N SR3252

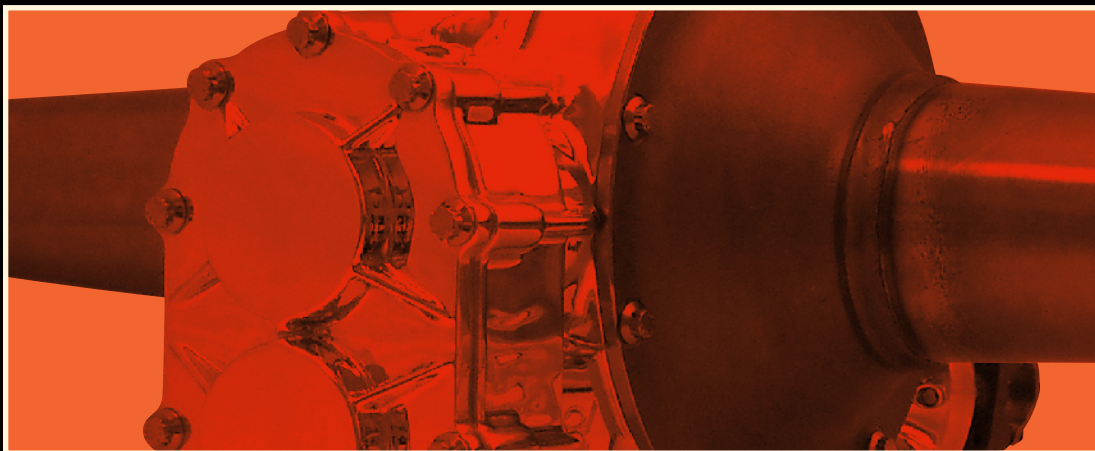
The Wedgelock is an all gear drive differential and is standard equipment in all V8 Independent Rears. This unique race proven gear design automatically senses wheel spin and delivers positive traction. Machined to accept stock steel bells. Very Smooth! Very Durable!



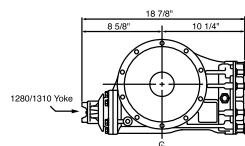
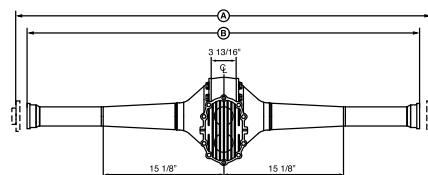
Assembly Shown With 930 CV Joint Adapter Flange  
P/N SR12626 Installed



# THE DIFFERENCE IS IN THE DETAILS



Nostalgia has never been better! This amazing assembly separates extraordinary from ordinary! Built to your specs, our Steel Tube & Bell V8 Quick Change includes a 3.78 Ring & Pinion, Wedgelock Differential (see page 17), Inner Tube Seals, and one set of Straight Cut , 6 Spline Gears of your choice.



| A   |
|---|
| Axle Flange to Axle Flange 56" Standard       |
| B   |
| Housing Flange to Housing Flange 51" Standard |

# STEEL TUBE & BELL V8

# You Asked & We Delivered!



Assembly P/N SR2550STB shown with Option SR9134 Gear Cover, Option SR8277-STB Stainless Steel Hardware & Option SR8207-V Polishing.

See Pages 56-57 for Exploded View and Parts List

**Standard 51.00 HF to HF uses 27 1/2" & 28" Axles**  
**Install Longer Axle On Left (Drivers Side)**

## ASSEMBLIES

**SR2220STB** Big Bearing Flanged Axle  
**SR2550STB** Big Bearing Flanged Axle (Torino®)  
 Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings  
**Please Note: When assembled, axle will be 1/2" longer on left side.**

## POPULAR OPTIONS

**SR2980** Axle Set  
**SR8154-6** Closed Drive, 6 Spline  
**SR8154-10** Closed Drive, 10 Spline  
**SR8207-V** Polished Center & Cover  
**SR8247-SRH6** Helical Gear (Specify Ratio)  
**SR8277-STB** Stainless Steel Hardware  
**SR9132** Polished Gear Cover Only  
**SR9134** Natural Cast Gear Cover

See Pages 38-39 For Optional Gear Covers



Assembly P/N SR2220STB shown with Standard Straight Finned Gear Cover, Option SR8277-STB Stainless Steel Hardware & Option SR8207-V Polishing.

Option SR9134



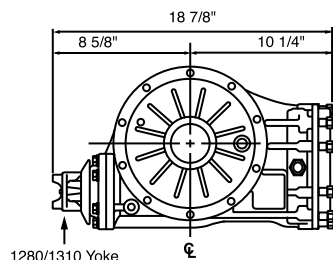
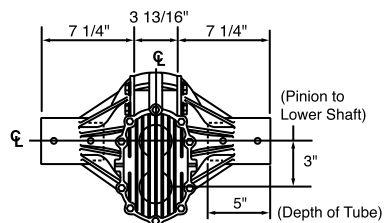
Gear Cover Sold Separate  
 P/N SR12350 Natural Cast Cover With Bearings  
 For Polishing Add  
 P/N SR8207-12350

18



GET USE  
TO THE STARES

# V8 QUICK CHANGE



Legendary styling and cutting edge technology for you Roadster guys! Our V8 Quick Change Rear features an 8 3/8" Ring & Pinion, Heat Treated Lower Shaft, Wedgelock Differential, Axle Seals and one Straight Cut, 6 Spline Gear Set of your choice. Uses stock appearing Flanged 31 Spline Axles (sold separately) that will accommodate after-market disc or stock brakes.



Assembly P/N SR2220 shown with Standard Straight Finned Gear Cover, Option SR8277-V8  
Stainless Steel Hardware & Option SR8207 Polishing.

See Pages 56-57 for Exploded  
View and Parts List

## ASSEMBLIES

**SR2220** Big Bearing Flanged Axle

**SR2550** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

**Please Note:** When assembled, axle will be 1/2" longer on left side. (Drivers Side)

## POPULAR OPTIONS

**SR2980**

Axle Set

**SR8207**

Polishing

**SR8211-V8B**

Billet Gear Cover

**SR8247**

Helical Gear (Specify Ratio)

**SR8277-V8**

Stainless Steel Hardware

**SR9132**

Polished Gear Cover Only

**SR9134**

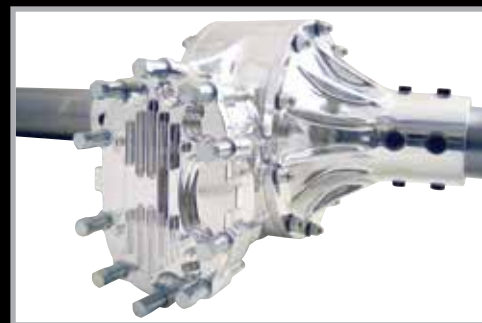
Natural Cast Gear Cover

See Pages 38-39 For Optional Gear Covers



**SR9341**

Vent Fitting  
3/8 - 24 x 1/2 Stainless



Assembly P/N SR2220 shown with Option SR8211-V8B Billet Gear Cover &  
Option SR8207 Polishing.

## WEDGELOCK



**P/N SR1792-31 31 Spline**

**P/N SR1792-28 28 Spline**

The Wedgelock is an all gear drive differential and is standard equipment in all V8 Quick Change Rears. This unique race proven gear design automatically senses wheel spin and delivers positive traction. Machined to accept stock steel bells. Very Smooth! Very Durable!



Option SR9134

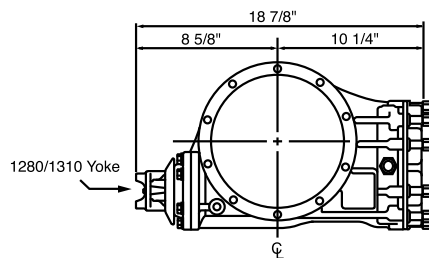
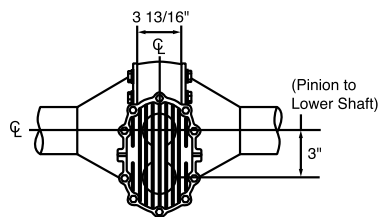


Gear Cover Sold Separate  
P/N SR12350 Natural Cast Cover With Bearings  
For Polishing Add  
P/N SR8207-12350





# QUICK CHANGE CENTER KIT OLD TIME ROCK & ROLL



A true American heritage, our V8 Quick Change Center Section is machined to accept Original Early Ford® Style Steel Tubes & Bells (not included). The V8 Center Kit includes an 8 3/8", 3.78 Ring & Pinion, Heat Treated Lower Shaft, a Wedgelock Differential and one 6 Spline, Straight Cut Gear Set of your choice.



***Bragging Rights!***

See Pages 58-59 for Exploded View and Parts List

Assembly P/N SR3605-31 shown with Standard Straight Finned Gear Cover & Option SR8207V Polishing

## ASSEMBLIES

**SR3605-31** 8 3/8" V8 Center Kit, 31 Spline

**SR3605-28** 8 3/8" V8 Center Kit, 28 Spline

**Please Note:** Assembly uses Late Model style 28 or 31 Spline Axles & requires late style bearing ends machined and welded to Early Ford® style tubes.

## POPULAR OPTIONS

**SR8154-6** Closed Drive, 6 Spline

**SR8154-10** Closed Drive, 10 Spline

**SR8207V** Polished Center & Cover

**SR8211V** Billet Gear Cover

**SR8247** Helical Gear (Specify Ratio)

**SR9132** Polished Gear Cover Only

**SR9134** Natural Cast Gear Cover

See Pages 38-39 For Optional Gear Covers

Option SR9134



Gear Cover Sold Separate  
P/N SR12350 Natural Cast Cover With Bearings  
For Polishing Add  
P/N SR8207-12350

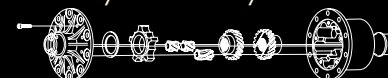
## WEDGELOCK



**P/N SR1792V-31 31 Spline**

**P/N SR1792V-28 28 Spline**

The Wedgelock is an all gear drive differential and is standard equipment in all V8 Center kits. This unique race proven gear design automatically senses wheel spin and delivers positive traction. Machined to accept stock steel bells. Very Smooth! Very Durable!

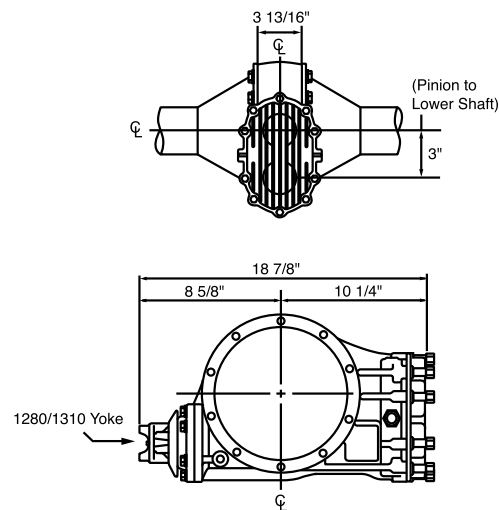




# TERKIT

## EARLY FORD®

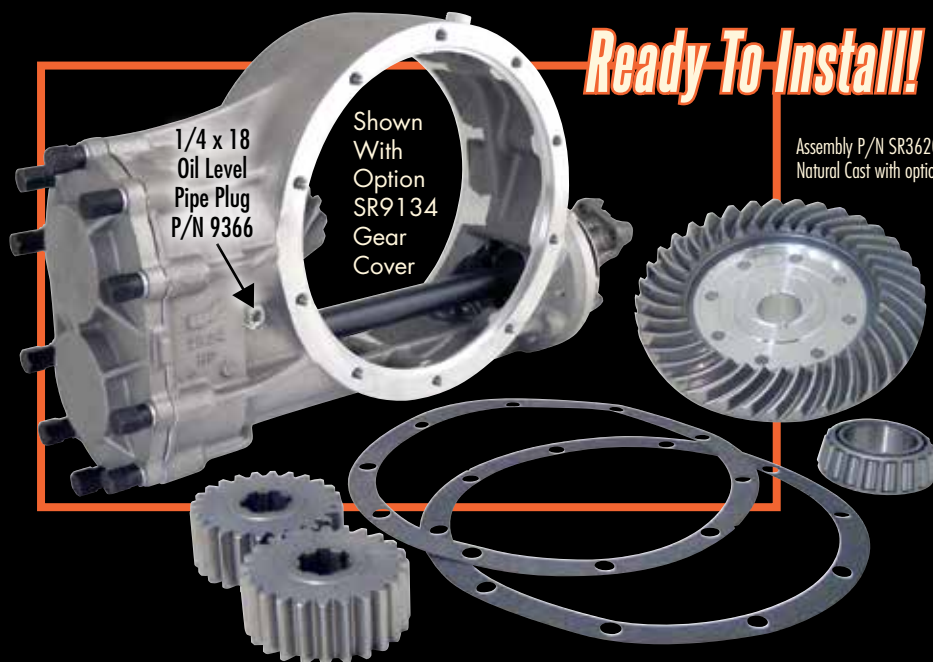
This assembly uses Original Early Ford® Steel Tubes & Bells, axles and carrier assembly. This kit comes complete with one Quick Change Center Section, 4.11 Ring & Pinion, one axle housing Gasket Set, one Carrier Bearing, one Straight Cut, 6 Spline Gear Set of your choice, all hardware and instructions.



# BUILD YOUR OWN CUSTOM REAR END

# V8

# Ready To Install!!



Option SR9134



Gear Cover Sold Separate  
P/N SR12350 Natural Cast Cover With Bearings  
For Polishing Add  
P/N SR8207-12350



Assembly shown with Option SR8154-6 Closed Drive Line, 6 Spline. See pages 60-61 for individual Closed Drive part numbers.



Assembly P/N SR3620 shown with Standard Straight Finned Gear Cover, Option SR8207-V Polishing & Stock Steel Bells (not included)

## ASSEMBLIES

See Pages 58-59 for Exploded View and Parts List

**SR3620** 8 3/8" Early Ford® V8 Center Kit

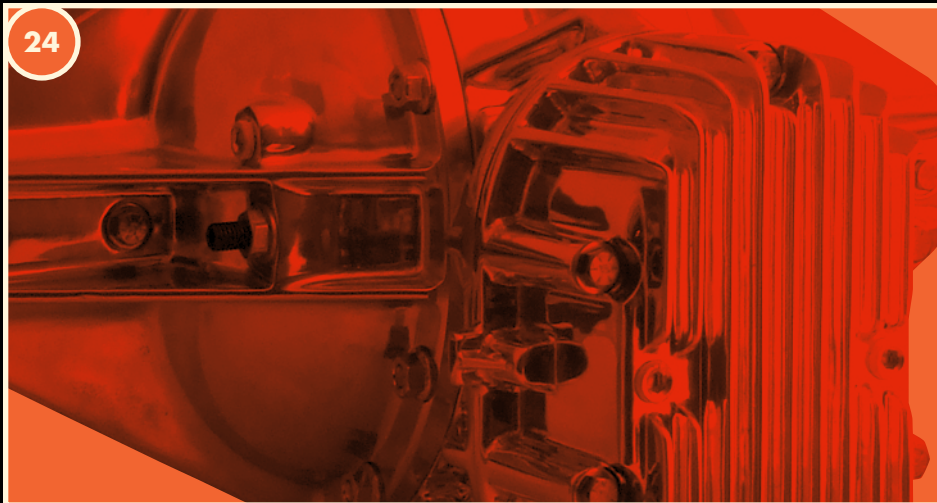
## POPULAR OPTIONS

**SR8154-6** Closed Drive, 6 Spline  
**SR8154-10** Closed Drive, 10 Spline  
**SR8207V** Polished Center & Cover  
**SR8211V** Billet Gear Cover  
**SR8247** Helical Gear (Specify Ratio)  
**SR9132** Polished Gear Cover Only  
**SR9134** Natural Cast Gear Cover

See Pages 38-39 For Optional Gear Covers

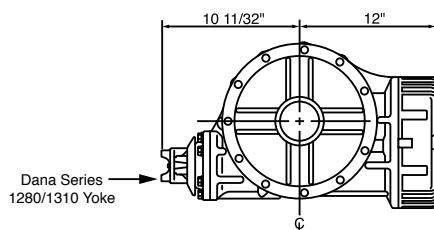
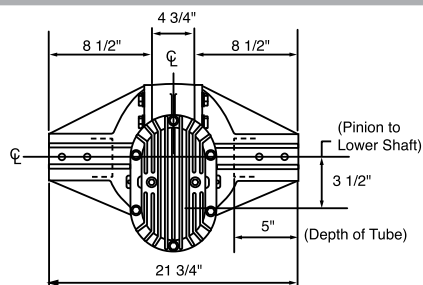


Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**



# 300 MPH CLUB

# XTREMELINER



We had the Bonneville Salt Flats in mind when we created this center section and side bells for our 10", 3.08 and 2.00 Ratio Ring & Pinion Quick Change.

Whether you are going for a land speed record or you just want a different ratio for the street, you will benefit from a beefed-up Center Section, Heat Treated Lower Shaft, 22 Spline Quick Change Gears, Heavy Duty Cover and the largest size Pinion Gear ever in a Quick Change.



# The Most Advanced QC Available!

25



Choose from our standard 3.08 or optional 2.00 Ring & Pinion  
Assembly P/N SR3920 shown with Standard Gear Cover & Option SR8207-308 Polishing

See Pages 60-61 for Exploded View and Parts List

## ASSEMBLIES

- SR3920** 3.08 Big Bearing Flanged Axle
- SR3925** 3.08 Big Bearing Flanged Axle (Torino®)
- SR3910** 3.08 Super Speedway Hubs
- SR3963** 3.08 2 1/2" Grand National Hubs
- SR3975** 3.08 2 1/2" Wide 5 Hubs

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

## POPULAR OPTIONS

- SR8207-308** Polishing
- SR8121W** 31 Spline Winters Track
- SR8115-31** 31 Spline Aluminum Spool
- SR8275-1** Yoke, 1350 Series
- SR8106-308V** VascoMax® Lower Shaft
- SR81308RR** 3.08 Ring & Pinion, Reverse Rotation

## 2.00 Applications

- SR81200** 2.00 Ratio Ring & Pinion
- SR8121W-200** 31 Spline Winters Track-2.00
- SR8115-31-200** 31 Spline Aluminum Spool
- SR8115-35-200** 35 Spline Aluminum Spool

## WINTERS TRACK



**SR6513-31** For 3.08 Ring & Pinion  
**SR6513-31-200** For 2.00 Ring & Pinion  
This virtually unbreakable, parallel design automatically senses wheel spin and delivers positive traction.



**SR9341**

Vent Fitting  
3/8 - 24 x 1/2 Stainless



Assembly P/N SR3920 shown with Option SR8207-308 Polishing & Option SR8275-1 1350 Series Yoke

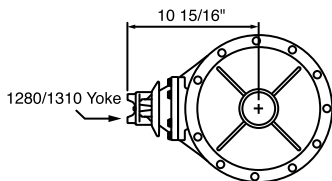
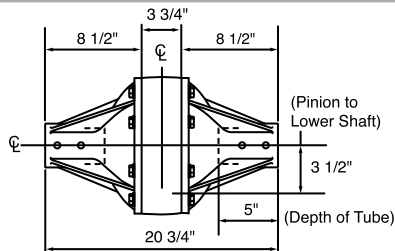


Aluminum Spool for 2.00 Ratio  
P/N SR4075A-31, 31 Spline  
P/N SR4075A-35, 35 Spline



# BANDS TYPICAL WHEN ONLY THE BEST WILL DO FULL SIZE

Go wild or mild with nothing but the newest parts and technology. This rear end assembly features a 10", 4.12 Ring & Pinion and our Winters Track Differential. OEM style bearing cups on the tube ends allow you to use flanged axles, after-market disc or stock brakes and the wheels you want.



# Crossing The Line!



Assembly P/N SR4225 shown in Natural Cast

See Pages 62-63 for Exploded View and Parts List

## ASSEMBLIES

- SR4220** Big Bearing Flanged Axle  
**SR4225** Big Bearing Flanged Axle (Torino®)  
 Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings



**SR9341**  
 Vent Fitting  
 3/8 - 24 x 1/2 Stainless

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207** Polishing



Use Winters Semi-Synthetic  
 Lube with Moly 80-90-140  
**P/N SR1730**

## WINTERS TRACK



### P/N SR6513-31

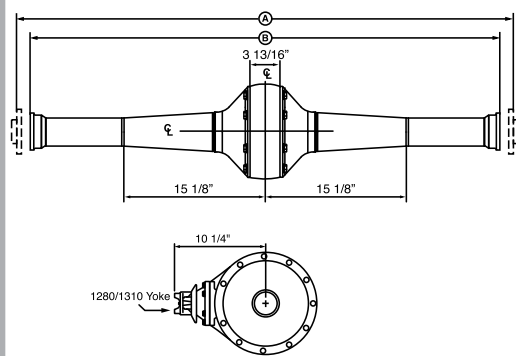
Our 31 Spline Winters Track Differential is standard equipment in all Full Size Banjo Style Assemblies. CNC machined to exacting tolerances. This virtually unbreakable, parallel gear design automatically senses wheel spin and delivers positive traction.





# WE FIND THE CHANCE TO IMPROVE WHAT HENRY BUILT

## STEEL TUBE & BELL


**A**

Axle Flange to Axle Flange 56" Standard

**B**

Housing Flange to Housing Flange 51" Standard

Taking the Banjo to the next level!  
 Stock appearing cast aluminum Banjo  
 Center with Winters Steel Tubes and  
 Bells. Built to your specs, this rear  
 comes complete with an 8 3/8",  
 3.78 Ratio Ring & Pinion and a  
 Wedgelock Differential.

# Puttin' Power To The Pavement!



Assembly P/N SR4225MSTB shown in Natural Cast

See Pages 62-63 for Exploded View and Parts List

## ASSEMBLIES

- SR4220MSTB** Big Bearing Flanged Axle  
**SR4225MSTB** Big Bearing Flanged Axle (Torino®)  
 Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207-BAN** Polishing  
**SR8277-MSTB** Stainless Steel Hardware



Use Winters Semi-Synthetic  
 Lube with Moly 80-90-140  
**P/N SR1730**

## WEDGELOCK



**P/N SR1792-31 31 Spline**

**P/N SR1792-28 28 Spline**

The Wedgelock is an all gear drive differential and is standard equipment in all Steel Tube & Bell Banjo Rears. This unique race proven gear design automatically senses wheel spin and delivers positive traction. Machined to accept stock steel bells. Very Smooth! Very Durable!

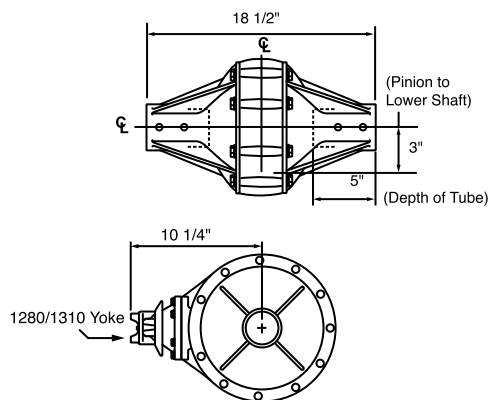






# BANJO STYLE TAKING THE BANJO TO A NEW LEVEL MINI

The 12 Rib Side Bell Mini Version of our Banjo Style Rear features an 8 3/8", 3.78 Ring & Pinion and our Wedgelock Differential. OEM style bearing cups on the tube ends allow you to use flanged axles, after-market disc or stock brakes and the wheels you want.



*Ooooh Baby!*



Assembly P/N SR4225M shown with option SR8207-MB Polishing

See Pages 64-65 for Exploded View and Parts List

## ASSEMBLIES

- SR4220M** Big Bearing Flanged Axle  
**SR4225M** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings



**SR9341**

Vent Fitting  
 3/8 - 24 x 1/2 Stainless

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207-MB** Polishing  
**SR8277-MB** Stainless Steel Hardware



Use Winters Semi-Synthetic  
 Lube with Moly 80-90-140  
**P/N SR1730**

## WEDGELOCK

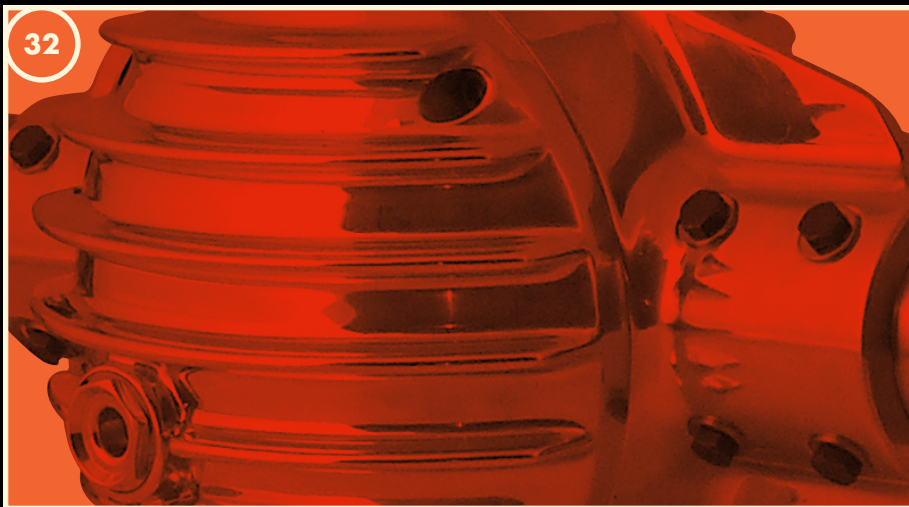


**P/N SR1792-31 31 Spline**

**P/N SR1792-28 28 Spline**

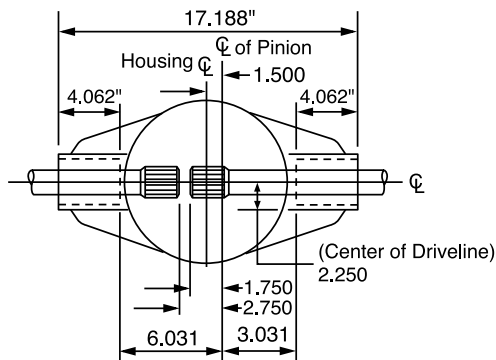
The Wedgelock is an all gear drive differential and is standard equipment in all Mini Style Banjo Rears. This unique race proven gear design automatically senses wheel spin and delivers positive traction. Machined to accept stock steel bells. Very Smooth! Very Durable!





# BREAK WITH TRADITION

# CHAMPIONSHIP 9"



Suddenly traditional rears know no boundaries. Breaking new ground, our Championship 9" Rear shouts Hot Rodding! Made from super strong 206 alloy, this 9" offers a new level of refinement that other rears will be measured against for years. This rear comes assembled with Ring & Pinion (specify ratio), Truetrac® Posi-Trac Differential and aluminum "Daytona" style Pinion Retainer. Accepts most stock or after-market equivalent components.

**SR9341** Vent Fitting  
3/8 - 24 x 1/2 Stainless



**Hot Rod History!**

See Pages 66-67 for Exploded View and Parts List

Assembly P/N SR92525CR shown with  
option SR8207-9CR Polishing, Complete

Cover positioned so that fins are vertical.



## ASSEMBLIES

**SR92520CR** Big Bearing Flanged Axle  
**SR92525CR** Big Bearing Flanged Axle (Torino®)

## POPULAR OPTIONS

**SR2980** Axle Set  
**SR8207-3611** Polishing, Cover Only  
**SR8207-9CR** Polishing, Complete



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

## HOUSING ONLY WITH TUBES INSTALLED

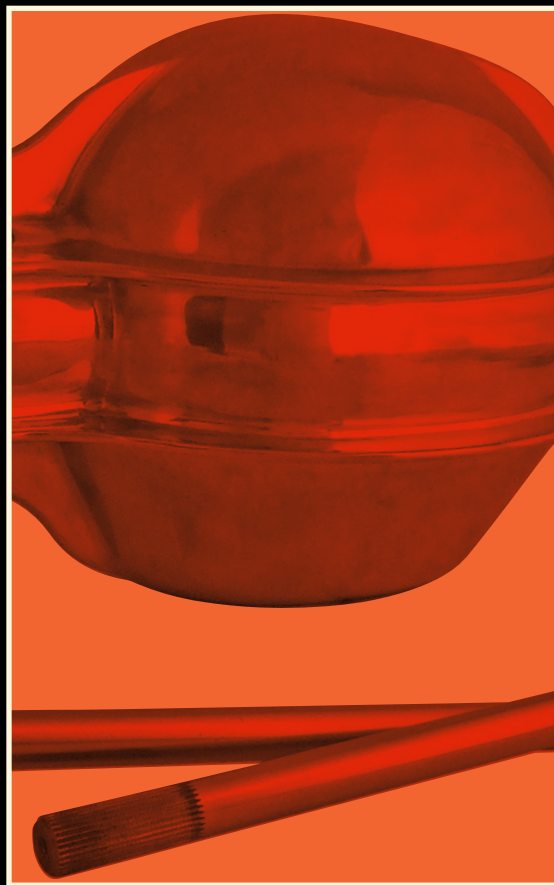
**SR92540CR** Big Bearing Flanged Axle  
**SR92545CR** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

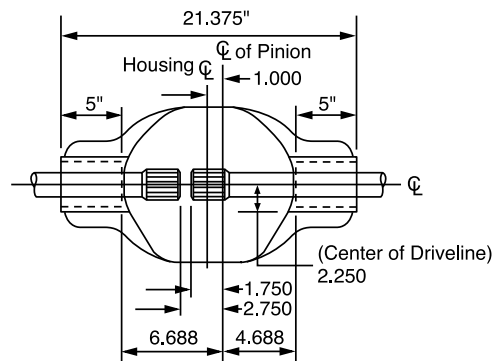
Accepts OEM components  
or after market equivalent

34

# AMERICAN RODDER WITH FLANGED AXLES 9"



Built to your specs, this assembly includes our Polished 9" Housing with Steel Tubes, Inner Tube Seals and a complete set of 31 Spline Flanged Axles. Pop in a stock Third Member. Done!





## Shopping For A New Rear?

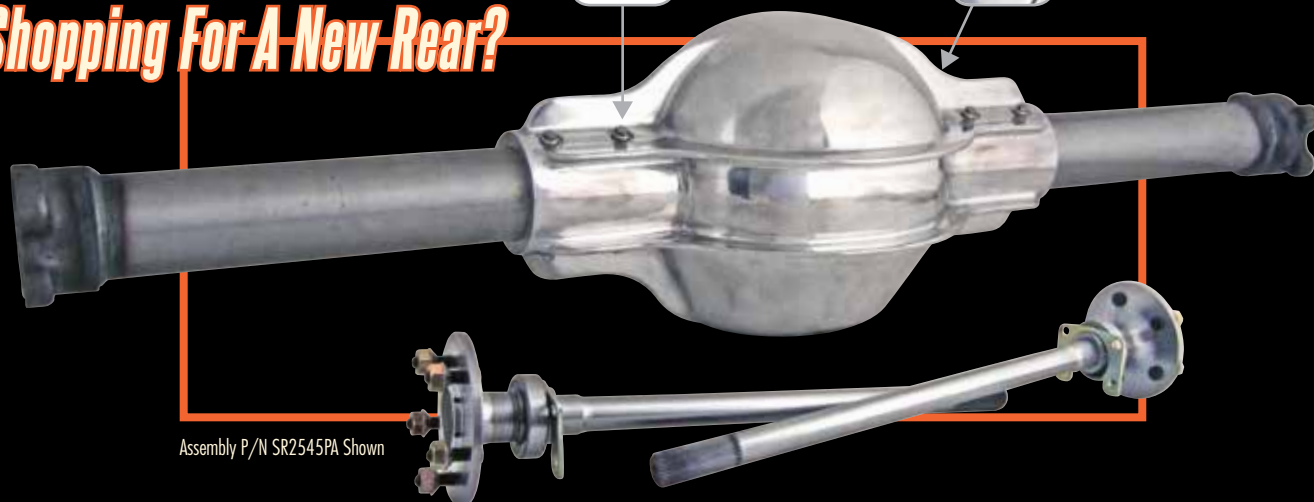
**SR9341** Vent Fitting  
3/8 - 24 x 1/2 Stainless



Hidden Oil Fill/Breather Plug  
behind the detailed fins.



#6 Part



Assembly P/N SR2545PA Shown

See Pages 68-69 for Exploded View and Parts List  
See Page 81 for Flanged Axle Info & Ordering Specs

## Your Shopping Cart Is Now Full!

## ASSEMBLIES

**SR2540PA** Big Bearing Flanged Axle  
**SR2545PA** Big Bearing Flanged Axle (Torino®)  
Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

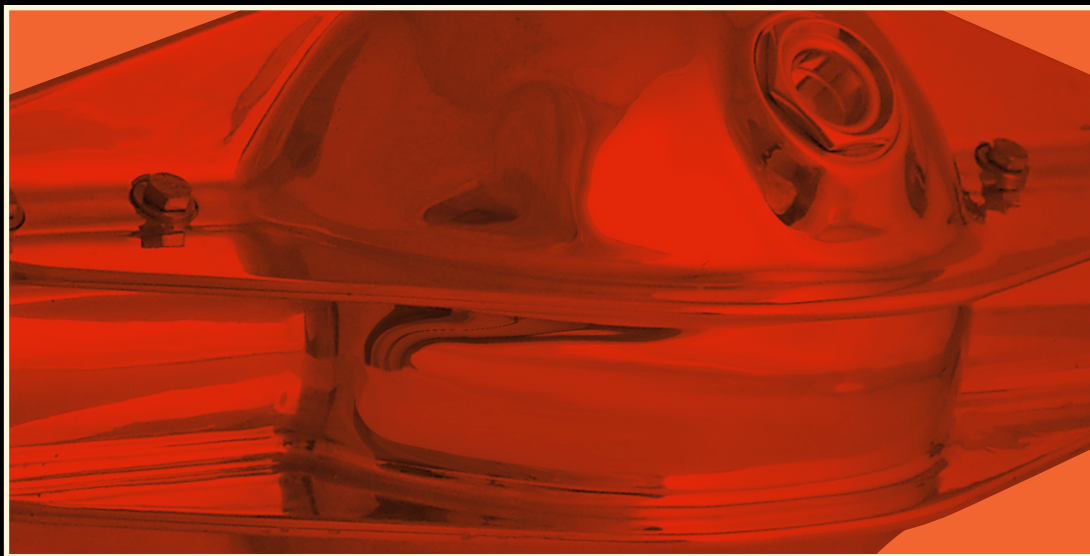


**SOLD  
SEPARATELY**

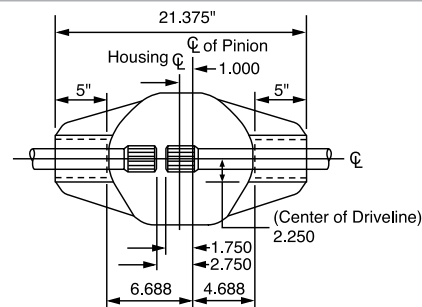
## 9" CENTER SECTION ASSEMBLY

### SR94303A

Center section assembly consists of Ring & Pinion (specify ratio), Truetrac® Posi-Trac Differential, Aluminum 3rd Member Housing and an Aluminum "Daytona" Style Pinion Retainer.



# WHAT CARS DREAM ABOUT



Clean, simple lines best describes Winters 9" Rears. With two different impressive housing designs to choose from, this rear comes assembled with Ring & Pinion (specify ratio), Truetrac® Posi-Trac Differential, Aluminum 3rd Member Housing and an Aluminum "Daytona" Style Pinion Retainer. Uses stock appearing Flanged 31 Spline Axles (sold separately) that will accommodate after-market disc or stock brakes.

**SR9341** Vent Fitting  
3/8 - 24 x 1/2 Stainless



***The Cure For Average!***



Assembly P/N SR92525 shown with  
option SR8207-9CR Polishing, Complete

See Pages 68-69 for Exploded View and Parts List

## ASSEMBLIES

- SR92520** Big Bearing Flanged Axle  
**SR92525** Big Bearing Flanged Axle (Torino®)

## POPULAR OPTIONS

- SR2980** Axle Set  
**SR8207-9CR** Polishing, Complete  
**SR8208-9** Thermal Dispersant  
**SR8249** Machined Housing



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

## HOUSING ONLY WITH TUBES INSTALLED

- SR2540** Big Bearing Flanged Axle  
**SR2545** Big Bearing Flanged Axle (Torino®)

Big Bearing Rears Accommodate Stock 3.150" O.D. Axle Bearings

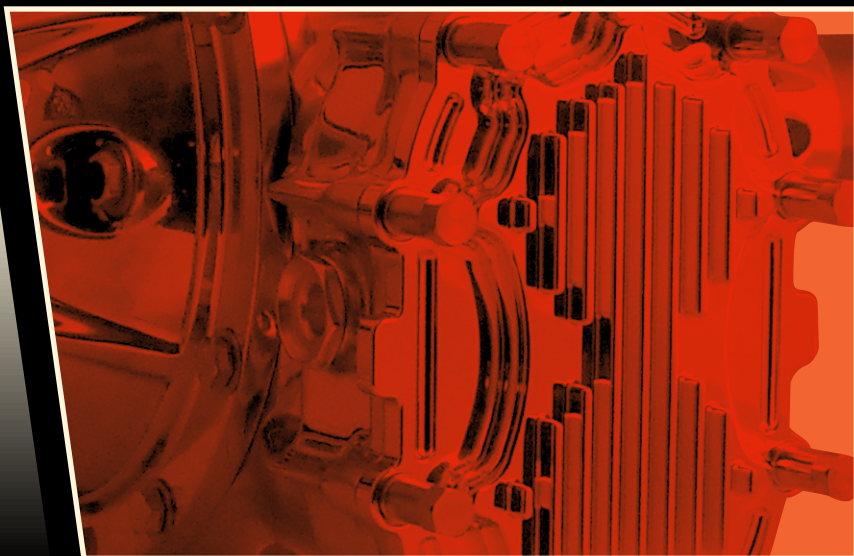
Accepts OEM components  
or after market equivalent



JUST SHOWIN'  
OFF

# GEAR COVERS

Want to be the center of  
attention? Then trick out your  
Quick Change Rear with one  
of our optional Billet Aluminum  
Gear Covers.





### Option SR8211CF

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter & Champ Independent



### Option SR4873

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter & Champ Independent



### Option SR8211

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter, Champ Independent, V8 Quick Change, Steel Tube & Bell V8 Quick Change & V8 Center Kits



### Option SR8211VM

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter & Champ Independent



### Option SR6630

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter & Champ Independent



### Option SR6630-Specify Color

Fits Championship Quick Change, Steel Tube & Bell Champ Adapter, Champ Adapter & Champ Independent



Also available with red or blue bearing caps.



### Option SR8211V

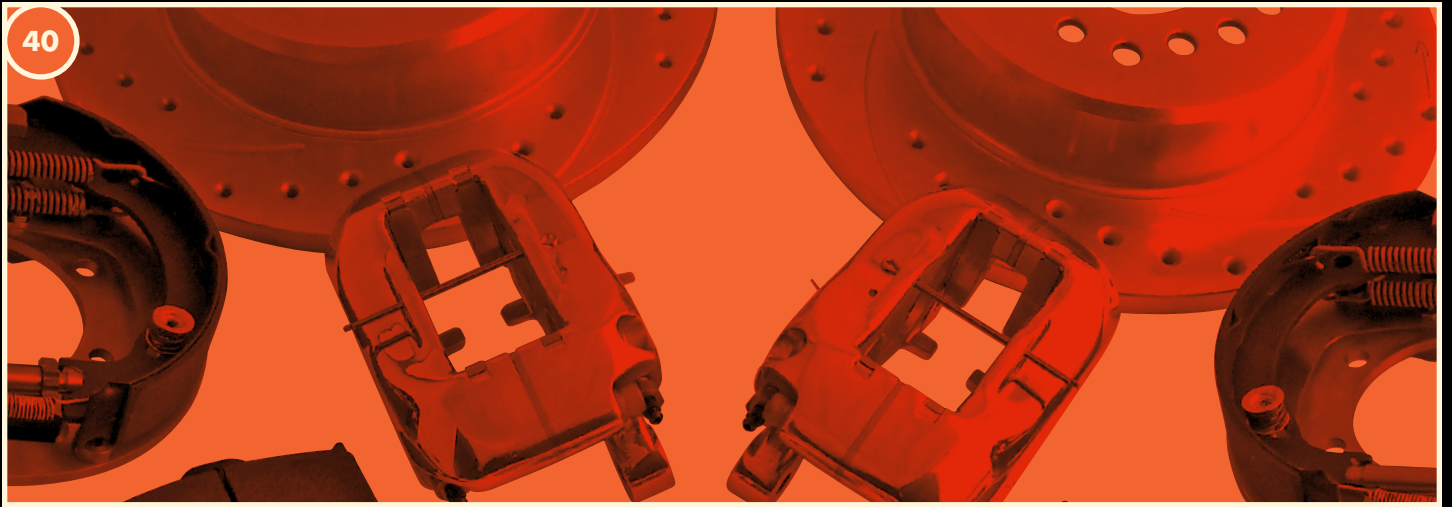
Fits V8 Quick Change, Steel Tube & Bell V8 Quick Change & V8 Center Kits



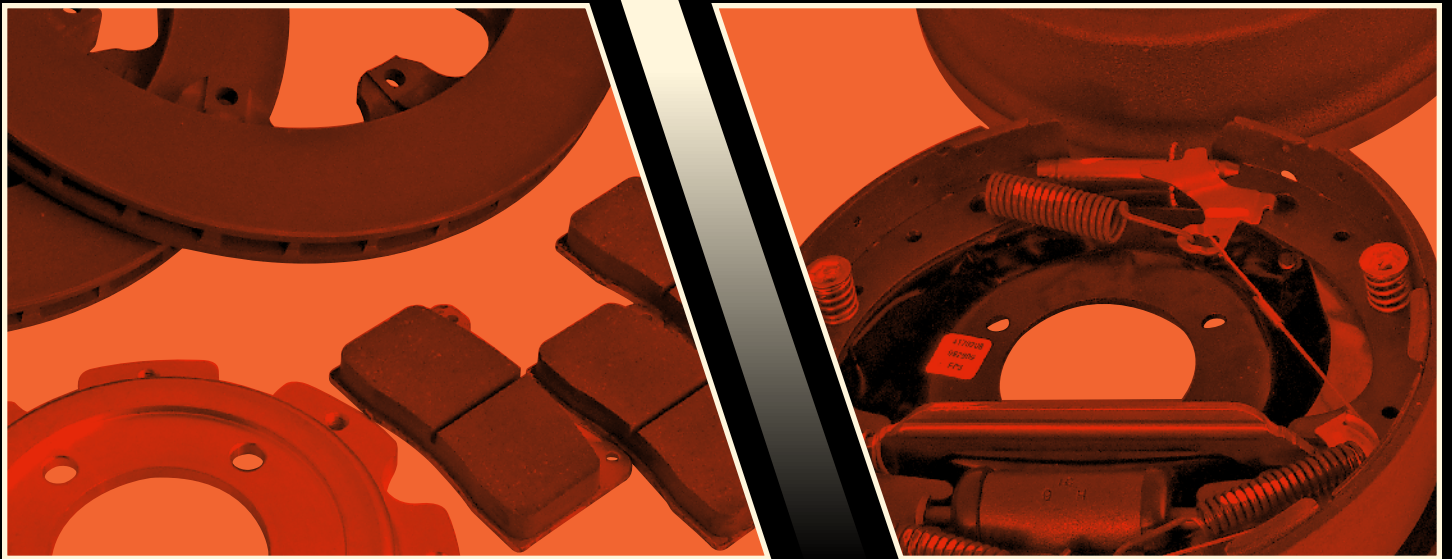
### Option SR8211-V8B

Fits V8 Quick Change, Steel Tube & Bell V8 Quick Change & V8 Center Kits





# BRAKE KITS



## STAINLESS STEEL REAR BRAKE KIT

### KIT P/N SR4917SS

All mounting hardware and backing plates are made of stainless steel. The zinc plated rotors are drilled and slotted for that great look and stopping power. Calipers come polished to top off this kit. All hardware is included.

- 3.062" Pilot
- 2 1/2" Offset
- 12 1/8" Rotor Diameter

## DUAL INBOARD BRAKE KIT

### KIT P/N SR2838

Built specifically for an Independent Quick Change P/N SRP437 (See Page 12) that requires Inboard Brakes. Kit comes with Polished calipers and all hardware needed to install.

## REAR DRUM BRAKE KIT

### KIT P/N SR4918

- 11" x 2 1/4" Shoe
- 5 x 5 1/2", 5 x 4 1/2" & 5 x 4 3/4" Bolt Pattern
- Fits Torino® Style Housing End with 2 1/2" Offset
- 2.875" Pilot



# TECH INFO

## SAVE THIS INFO FOR REFERENCE

This tech info is intended to be used as a guide in the maintenance and set-up of your Winters Performance Rear End. Our instructions, along with your common sense, will give you the satisfaction and performance that you expect and deserve when you use Winters Performance.

**MODEL #** \_\_\_\_\_

**TYPE** \_\_\_\_\_

**SERIAL #** \_\_\_\_\_

**PURCHASE DATE** \_\_\_\_\_

# FREQUENTLY ASKED QUESTIONS

43

- **What type of oil should I use in my Winters Rear End?**

Use a good quality lube, such as Winters 80-90-140 semi-synthetic with moly.

- **What oil level should I maintain in my Winters Rear End?**

At two places. (1) The rear end cavity. (2) Quick change gear cavity. See Figure 1 at right. **DO NOT OVER FILL.** Too much lube causes excessive heat!

*Championship 10"*

Maintain oil level at 2" below axle center line. Make sure the car is level when checking oil.

*V8 8 3/8", Mini*

Maintain oil level at 1 3/4" below axle center line. Make sure the car is level when checking oil.

- **How do I fill my Winters Rear End and quick change gear cavity with oil?**

The level plug is in the right side bell (See Figure 1). Optional pinion inspection plug in the right bell may be used as a fill plug. **DO NOT USE INSPECTION PLUG TO DETERMINE FLUID LEVEL.**

- **Ring Gear Bolt Torque Specifications**

Threaded Ring Gear Bolts- 60 ft lbs using red thread lock.

- **Thru Bolt & Side Bell Stud Torque Specifications**

Full Size Rears (7/16" Thru Bolts)- 35 ft lbs

V8/Mini (3/8" Studs)- 30 ft lbs

- **How do I install a side tube into a side bell?**

**DO NOT TORCH!** Bell cracking may occur. Place the tube in a 5 gallon bucket filled with ice. Make sure the bell is clean and free of chemicals and flammable materials. Heat the side bell in an oven to 270°-300°F. Vaseline the bell bore and drop the tube into the bell.

- **Can I weld brackets to my steel side tubes?**

Yes. Weld a series of 1/2" long "tacks" along the bracket starting at the ends, then alternate back and forth towards the center. Long continuous welds will heat and "draw" the tubing, causing distortion.

- **Can I use helical quick change gears in my Winters Rear End?**

Helical cut gears, although not recommended in racing applications, do have their advantages in street applications. Quick change gear noise at highway speeds can be reduced with helical cut gears versus conventional straight cut gears. Quick change gear end play (clearance) must be limited to .010 max.

- **Can gears from different gear sets be mixed to form new ratios?**

No. Gears are matched by pitch, diameter, tooth count and paired for proper backlash. Once two gears are paired, they must remain together.

- **What is the correct way to install quick change gears?**

The machined lip faces out.

- **Can I remove my tubes and bells for painting?**

Yes. Remove left side bell first by standing rear on right side tube, this will keep the differential from falling out. Before reassembling, now is a good time to pre-lube all seals and bearings. Maintaining a dirt free environment will result in a clean rear.

- **How do I remove my pinion in my Winters Rear End?**

Make sure the center is clean and free of chemicals and flammable materials. Heat the center in an oven to 270°-300°F. **EXERCISE CAUTION- MAGNESIUM CAN BE IGNITED!** Torching your center will damage the casting and ring & pinion life will be adversely affected.

- **Can I determine ring & pinion ration without opening the rear?**

Yes. Elevate the car (engine off). Remove quick change gears. Chalk mark the tire at the 12 o'clock position. Chalk mark the pinion at the 12 o'clock position. Rotate the tire by hand one complete revolution. Count pinion rotation as tire is rotated. Just past four revolutions = 4.11/4.12, 3 7/8 revolutions = 3.78.

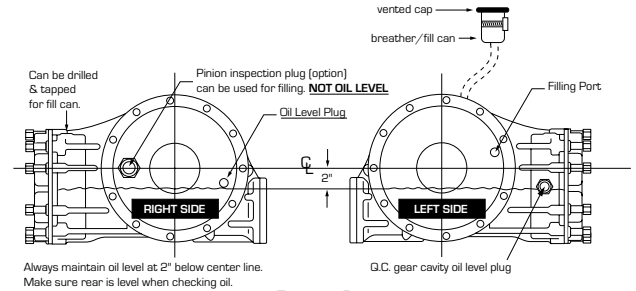
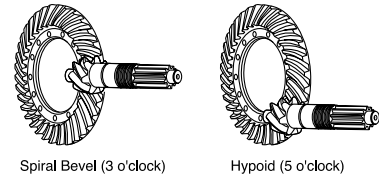


Figure 1



## SR2525 Big Bearing Flanged Axle (Torino®)

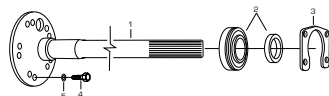
**\*SR2520SC** Big Bearing Flanged Axle

## \*SR2525SC Big Bearing Flanged Axle (Torino®)

See pages 70-72 for Set-Up Instructions



## FLANGED AXLES SET P/N SR2980



| # | P/N      | DESCRIPTION  | QTY REQ'D |
|---|----------|--|-----------|
| 1 | 2268D-XX | Flanged Axle   | 1         |
| 2 | 8687     | Bearing & Retainer Set   | 1         |
| 3 | 3374-01  | Retainer Plate, Ford <sup>®</sup> , Big Bearing                        | 1         |
| 3 | 3374-02  | Retainer Plate, Ford <sup>®</sup> , Big Bearing (Torino <sup>®</sup> ) | 1         |
| 4 | 3834-01  | 1/2-20 x 2" Stud, Press-In   | 5         |
| 4 | 4266     | 1/2-20 x 2" Stud, Screw-In   | 5         |
| 5 | 8812     | Internal Star Lockwasher, Stud   | 5         |

\* Specify Length when ordering



# CHAMPIONSHIP QUICK CHANGE

45

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N      | DESCRIPTION                                | QTY REQ'D |
|-----|----------|--|-----------|
| 1   | 5840     | Aluminum "Sprint" Center                   | 1         |
| 2*  | 6697-01  | Aluminum 4 Rib Right Side Bell             | 1         |
| 2*  | 1663-01  | Aluminum HD 6 Rib Right Side Bell          | 1         |
| 2*  | 5016-01  | Aluminum HD 8 Rib Right Side Bell          | 1         |
| 3*  | 6697-02  | Aluminum 4 Rib Left Side Bell              | 1         |
| 3*  | 1663-02  | Aluminum HD 6 Rib Left Side Bell           | 1         |
| 3*  | 5016-02  | Aluminum HD 8 Rib Left Side Bell           | 1         |
| 3*  | 5016-05  | Aluminum Lightweight 8 Rib Right Side Bell | 1         |
| 3*  | 5016-02M | Aluminum Lightweight 8 Rib Left Side Bell  | 1         |
| 4   | 6513-31  | Winters Track, 31 Spline                   | 1         |
| 5   | 5714     | Ring & Pinion (4.12 Ratio Standard)        | 1         |
| 6*  | 7403     | O'Ring, 8 Rib Bell                         | 2         |
| 6*  | 7403T    | O'Ring, 4 & 6 Rib Bell                     | 2         |
| 7   | 7205     | Seal, Side Bell                            | 2         |
| 8   | 7310     | Bearing Cup, Side Bell                     | 2         |
| 9*  | 7340     | Bearing Cone, Differentials                | 2         |
| 10* | 5295     | Shim Kit, Differentials                    | 1         |
| 11  | 7852     | Ring Gear Bolt, Threaded Ring Gear         | 12        |
| 12  | 7815     | 3/8" Belleville Washer, Threaded Ring Gear | 12        |
| 13  | 7111B    | 3/8" Recessed Socket Head Pipe Plug        | 2         |
| 14  | 7331     | Roller Bearing, Pinion Nose                | 1         |
| 15  | 7339     | Shielded Ball Bearing, Lower Shaft         | 1         |
| 16  | 7308     | Bearing Cone, Pinion Shaft                 | 2         |
| 17  | 7307     | Double Bearing Cup, Pinion Shaft           | 1         |
| 18  | 5055     | Bearing Washer                             | 1         |
| 19  | 6485R    | Posi-Lock Nut, Pinion Shaft                | 1         |
| 20  | 7445     | O'Ring, Posi-Lock                          | 1         |
| 21  | 6484     | Posi-Lock Retainer, Pinion Shaft           | 1         |
| 22  | 5020     | Retaining Ring, Pinion                     | 1         |
| 23  | 6296A    | Retaining Plate, Pinion                    | 1         |
| 24  | 2374     | Lock Tab                                   | 3         |
| 25  | 7110     | 3/8-16 x 1" HHCS, Retaining Plate          | 6         |
| 26  | 8500     | Quick Change Gear Set                      | 1         |
| 27  | 6729HD   | Gasket, Gear Cover, HD                     | 1         |
| 28* | 6508     | Gear Cover                                 | 1         |
| 29* | 7332     | Ball Bearing, Gear Cover                   | 2         |
| 33  | 7794     | 3/8-16 Steel High Nut                      | 10        |

| #                   | P/N      | DESCRIPTION                               | QTY REQ'D |
|---------------------|----------|---|-----------|
| 34                  | 7398     | 5/16" Diameter Ball, Gear Cover           | 10        |
| 35                  | 7802     | 3/8-16 x 1 3/4" Stud, Gear Cover          | 10        |
| 36                  | 7610     | Retaining Ring, Lower Shaft               | 1         |
| 37                  | 5003     | Heat Treated Lower Shaft                  | 1         |
| 38                  | 7390     | Front Ball Bearing, Lower Shaft           | 1         |
| 39                  | 7413     | O'Ring, Seal Plate                        | 1         |
| 40                  | 7652     | Retaining Ring, Seal Plate (.750" Seal)   | 1         |
| 41                  | 7204T    | Seal, Seal Plate (Thick Seal .750")       | 1         |
| 42                  | 7474     | O'Ring, Seal                              | 1         |
| 43                  | 5018-01M | Seal Plate, .750" Seal (.375" P/N 5018M)  | 1         |
| 44                  | 7114     | 3/8" SAE Flatwasher                       | 6         |
| 45                  | 7107     | 3/8-16 x 1 1/4" HHCS, Seal Plate          | 6         |
| 47*                 | 3533     | Drive Yoke, 1310, Steel                   | 1         |
| 47*                 | 5038AS   | Drive Yoke, 1310, Billet Aluminum         | 1         |
| 47*                 | 3588     | Drive Yoke, 1350, Steel                   | 1         |
| 48                  | 5037     | Retaining Washer, Drive Yoke              | 1         |
| 49                  | 7109Y    | 3/8-24 x 1" HHCS, Drive Yoke              | 1         |
| 50                  | 7176     | 7/16-20 x 5 1/2" Thrubolt                 | 10        |
| 51                  | 7178     | 7/16" SAE Flatwasher, Thrubolt            | 22        |
| 52                  | 7177     | 7/16-20 Flanged Locknut, Thrubolt         | 10        |
| 53                  | 7117     | 7/16-14 x 1 1/4" HHCS                     | 2         |
| 54*                 | 7155     | 1/2-13 Adjusting Screw, 8 Rib Bell        | 1         |
| 54*                 | 6149     | 1/2-13 Adjusting Screw, 4 & 6 Rib Bell    | 1         |
| 55                  | 7167     | 1/2" SAE Flatwasher, Adjusting Screw      | 1         |
| 56                  | 7137     | 1/2-13 Jam Nut, Adjusting Screw           | 1         |
| 57                  | 5010     | Thrustblock                               | 1         |
| 58*                 | 7109     | 3/8-24 x 1" HHCS, 8 Rib Side Bell         | 16        |
| 58*                 | 7109S    | 3/8-24 x 3/4" HHCS, 4 & 6 Rib Side Bell   | 16        |
| 59                  | 7114     | 3/8" SAE Flatwasher                       | 16        |
| 60                  | 7454     | O'Ring, Plug                              | 1         |
| 61                  | 6857     | Inspection Plug                           | 1         |
| 62                  | SR9341   | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |
| <b>6 BOLT COVER</b> |          |   |           |
| 63                  | 12088    | Aluminum 6 Bolt Center                    | 1         |
| 64                  | 12175    | Billet Aluminum 6 Bolt Gear Cover         | 1         |
| 65                  | 12417    | Bearing Retainer                          | 2         |
| 66                  | 2966-02  | Breather Assembly (Sold Separately)       | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

# CHAMPIONSHIP HEAVY DUTY

## SR2520HD Big Bearing Flanged Axle SR2525HD Big Bearing Flanged Axle (Torino®)

See pages 70-72 for Set-Up Instructions

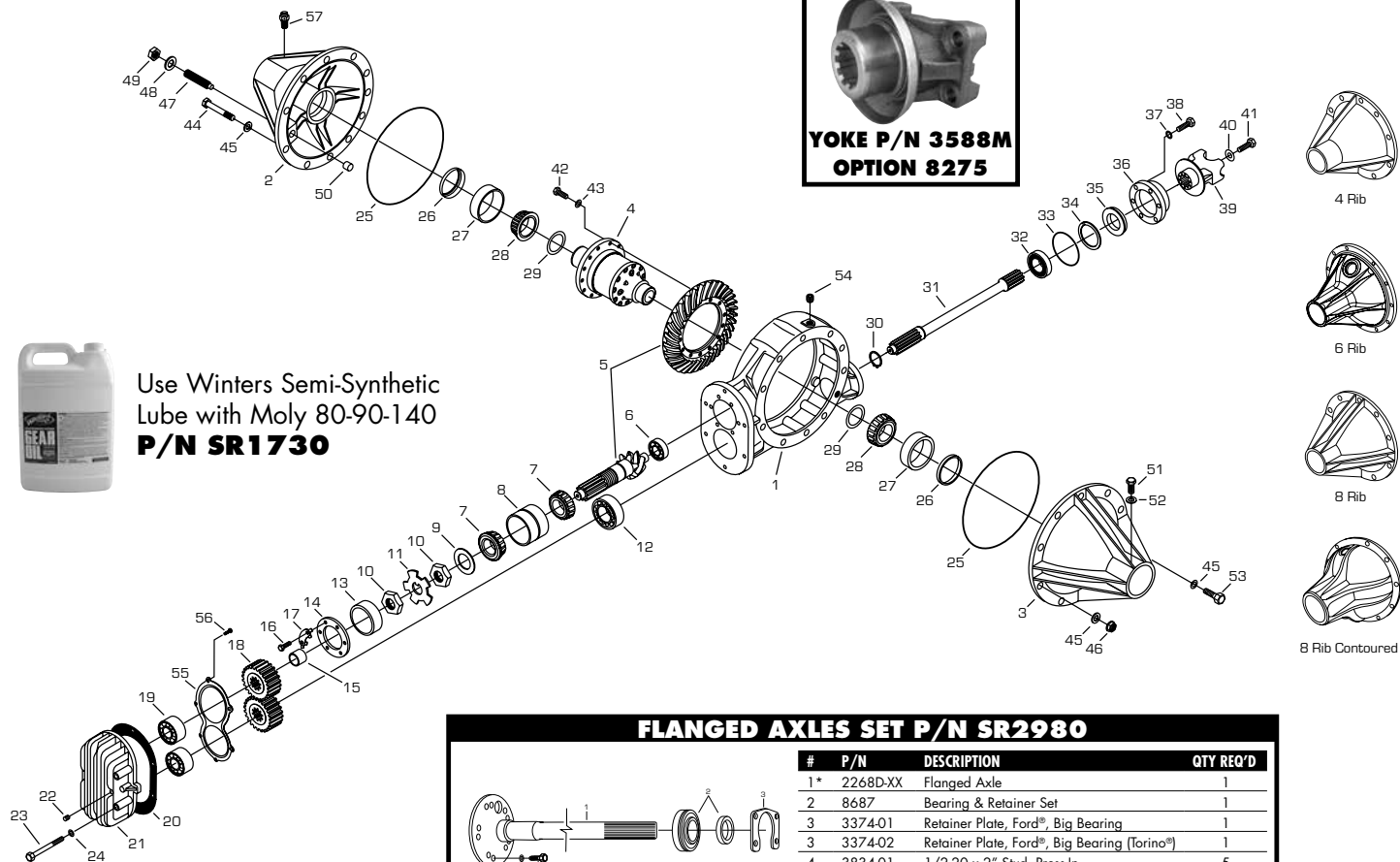
### 1350 SERIES



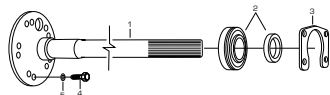
**YOKE P/N 3588M  
OPTION 8275**



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**



### FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N      | DESCRIPTION                                | QTY REQ'D |
|-----|----------|--|-----------|
| 1   | 5012     | Aluminum "Sprint" Center                   | 1         |
| 2*  | 6697-02  | Aluminum 4 Rib Left Side Bell              | 1         |
| 2*  | 1663-02  | Aluminum HD 6 Rib Left Side Bell           | 1         |
| 2*  | 5016-02  | Aluminum HD 8 Rib Left Side Bell           | 1         |
| 3*  | 6697-01  | Aluminum 4 Rib Right Side Bell             | 1         |
| 3*  | 1663-01  | Aluminum HD 6 Rib Right Side Bell          | 1         |
| 3*  | 5016-01  | Aluminum HD 8 Rib Right Side Bell          | 1         |
| 3*  | 5016-05  | Aluminum Lightweight 8 Rib Right Side Bell | 1         |
| 3*  | 5016-02M | Aluminum Lightweight 8 Rib Left Side Bell  | 1         |
| 4   | 6513-31  | Winters Track, 31 Spline                   | 1         |
| 5   | 5714     | Ring & Pinion (4.12 Ratio Standard)        | 1         |
| 6   | 7331     | Roller Bearing, Pinion Nose                | 1         |
| 7   | 7308     | Bearing Cone, Pinion Shaft                 | 2         |
| 8   | 7307     | Double Bearing Cup, Pinion Shaft           | 1         |
| 9   | 5055     | Bearing Washer                             | 1         |
| 10  | 5032R    | Jam Nut, Pinion Shaft                      | 2         |
| 11  | 5056     | Bearing Lockwasher                         | 1         |
| 12  | 7339     | Shielded Ball Bearing, Lower Shaft         | 1         |
| 13  | 5020     | Retaining Ring, Pinion                     | 1         |
| 14  | 6296A    | Retaining Plate, Pinion                    | 1         |
| 15  | 5021     | Quick Change Gear Spacer                   | 1         |
| 16  | 7110     | 3/8-16 x 1" HHCS, Retainer Plate           | 6         |
| 17  | 2374     | Lock Tab                                   | 3         |
| 18  | 8500     | Quick Change Gear Set                      | 1         |
| 19  | 8659     | Ball Bearing, Gear Cover                   | 2         |
| 20  | 1764HD   | Gasket, Gear Cover, HD                     | 1         |
| 21  | 5017HD   | Aluminum Gear Cover, Less Bearings         | 1         |
| 22  | 7111B    | 3/8" SH Pipe Plug                          | 4         |
| 23  | 7108     | 3/8-16 x 4" HHCS, Gear Cover               | 6         |
| 24  | 7114HD   | 3/8" HD Flatwasher                         | 6         |
| 25* | 7403     | O'Ring, 8 Rib Side Bell                    | 2         |
| 25* | 7403T    | O'Ring, 4 & 6 Rib Side Bell                | 2         |
| 26  | 7205     | Seal, Side Bell                            | 2         |

| #   | P/N      | DESCRIPTION                               | QTY REQ'D |
|-----|----------|---|-----------|
| 27  | 7310     | Bearing Cup, Side Bell                    | 2         |
| 28* | 7340     | Bearing Cone, Differentials               | 2         |
| 29  | 5295     | Shim Kit, Differentials                   | 2         |
| 30  | 7610     | Retaining Ring, Lower Shaft               | 1         |
| 31  | 5003     | Heat Treated Lower Shaft                  | 1         |
| 32  | 7311     | Double Row Ball Bearing, Lower Shaft      | 1         |
| 33  | 7413     | O'Ring, Seal Plate                        | 1         |
| 34  | 7652     | Retaining Ring, Seal Plate (.750" Seal)   | 1         |
| 35  | 7204T    | Seal, Seal Plate (Thick Seal .750")       | 1         |
| 36  | 5018-01M | Seal Plate, .750" Seal                    | 1         |
| 37  | 7114     | 3/8" SAE Flatwasher                       | 6         |
| 38  | 7107     | 3/8-16 x 1 1/4" HHCS, Seal Plate          | 6         |
| 39* | 5038     | Drive Yoke, 1310, Steel                   | 1         |
| 39* | 5038AS   | Drive Yoke, 1310, Aluminum                | 1         |
| 39* | 3588M    | Drive Yoke, 1350, Steel                   | 1         |
| 40  | 5037     | Retaining Washer, Drive Yoke              | 1         |
| 41  | 7109Y    | 3/8-24 x 1" HHCS, Drive Yoke              | 1         |
| 42  | 7852     | Ring Gear Bolt, Threaded Ring Gear        | 12        |
| 43  | 7815     | 3/8" Belleville Washer                    | 12        |
| 44  | 7176     | 7/16-20 x 5 1/2" Thrubolt                 | 10        |
| 45  | 7178     | 7/16" SAE Flatwasher                      | 22        |
| 46  | 7177     | 7/16-20 Flanged Locknut                   | 10        |
| 47  | 7155     | 1/2-13 Adjusting Screw                    | 1         |
| 48  | 7167     | 1/2" SAE Flatwasher                       | 1         |
| 49  | 7137     | 1/2-13 Jam Nut, Adjusting Screw           | 1         |
| 50  | 5010     | Thrustblock, Adjusting Screw              | 1         |
| 51  | 7109     | 3/8-24 x 1" HHCS, Side Bell               | 16        |
| 52  | 7114     | 3/8" SAE Flatwasher                       | 16        |
| 53  | 7117     | 7/16-14 x 1 1/4" HHCS                     | 2         |
| 54  | 7111B    | 3/8" SH Pipe Plug                         | 2         |
| 55  | 3258     | Bearing Retainer, Gear Cover              | 1         |
| 56  | 8087     | 1/4-20 x 1 1/2" BHCS                      | 6         |
| 57  | SR9341   | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

# CHAMP TAPERED STEEL TUBE & BELL

**\*SR2530STB** Big Bearing Flanged Axle  
**\*SR2535STB** Big Bearing Flanged Axle (Torino®)

\*Steel Tube & Bell Assembly

See pages 70-72 for Set-Up Instructions

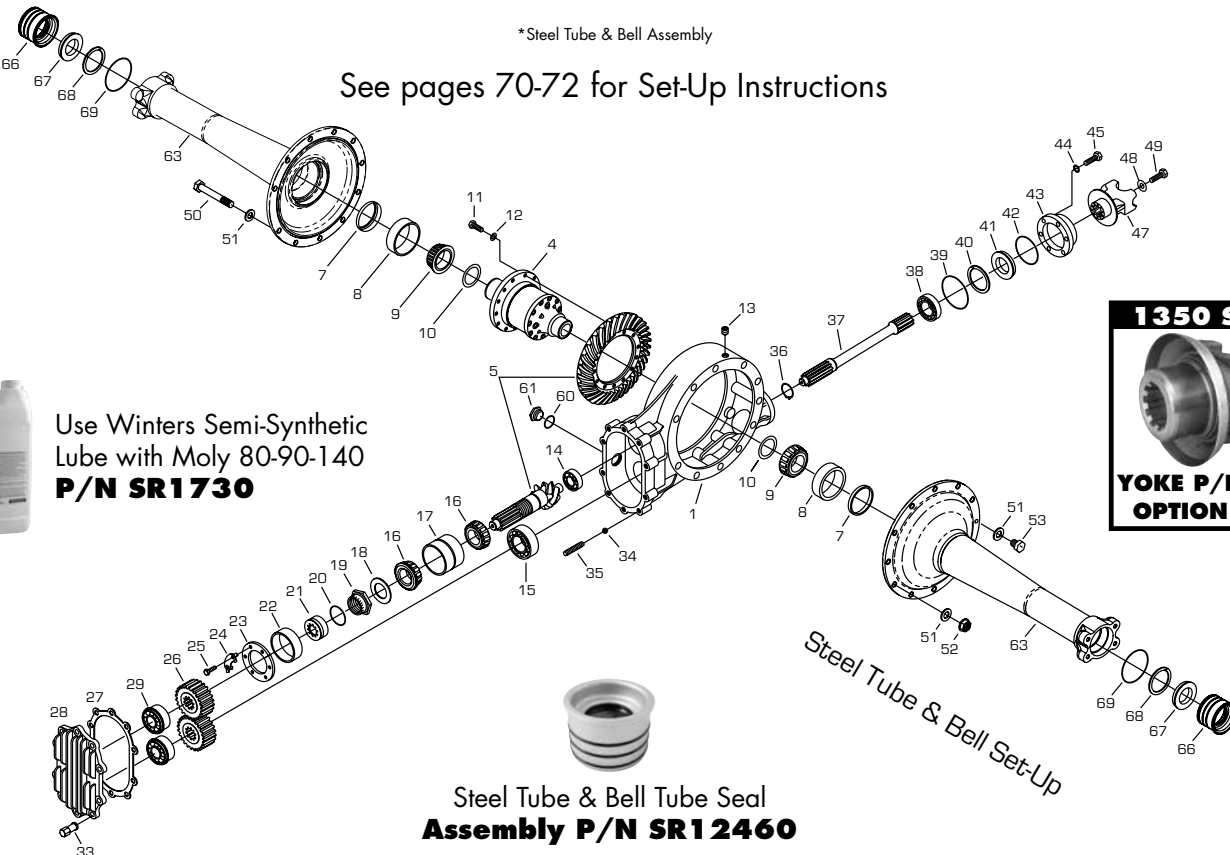


Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**



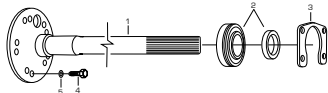
**1350 SERIES**

**YOKE P/N 3588  
OPTION 8275**



Steel Tube & Bell Tube Seal  
**Assembly P/N SR12460**

## FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

# CHAMP TAPERED STEEL TUBE & BELL

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**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #  | P/N    | DESCRIPTION                                | QTY REQ'D |
|----|--------|--|-----------|
| 1  | 5840   | Aluminum "Sprint" Center Section           | 1         |
| 4  | 2419   | Winters Track, 31 Spline                   | 1         |
| 5  | 5714   | Ring & Pinion, 4.12 Standard               | 1         |
| 6  | 7403T  | O'Ring, 4 & 6 Rib Bell                     | 2         |
| 7  | 7205   | Seal, Side Bell                            | 2         |
| 8  | 7357   | Bearing Cup, Side Bell                     | 2         |
| 9  | 7358   | Bearing Cone                               | 2         |
| 10 | 6115   | Shim Kit                                   | 1         |
| 11 | 7852   | Ring Gear Bolt, Threaded Ring Gear         | 12        |
| 12 | 7815   | 3/8" Belleville Washer, Threaded Ring Gear | 12        |
| 13 | 7111B  | 3/8" Recessed Socket Head Pipe Plug        | 2         |
| 14 | 7331   | Roller Bearing, Pinion Nose                | 1         |
| 15 | 7339   | Shielded Ball Bearing, Lower Shaft         | 1         |
| 16 | 7308   | Bearing Cone, Pinion Shaft                 | 2         |
| 17 | 7307   | Double Bearing Cup, Pinion Shaft           | 1         |
| 18 | 5055   | Bearing Washer                             | 1         |
| 19 | 6485R  | Posi-Lock Nut, Pinion Shaft                | 1         |
| 20 | 7445   | O'Ring, Posi-Lock                          | 1         |
| 21 | 6484   | Posi-Lock Retainer, Pinion Shaft           | 1         |
| 22 | 5020   | Retaining Ring, Pinion                     | 1         |
| 23 | 6296A  | Retaining Plate, Pinion                    | 1         |
| 24 | 2374   | Lock Tab                                   | 3         |
| 25 | 7110   | 3/8-16 x 1" HHCS, Retaining Plate          | 6         |
| 26 | 8500   | Quick Change Gear Set                      | 1         |
| 27 | 6729HD | Gasket, Gear Cover, HD                     | 1         |
| 28 | 6508   | Gear Cover                                 | 1         |
| 29 | 7332   | Ball Bearing, Gear Cover                   | 2         |
| 33 | 7794   | 3/8-16 Steel High Nut                      | 10        |
| 34 | 7398   | 5/16" Diameter Ball, Gear Cover            | 10        |
| 35 | 7802   | 3/8-16 x 1 3/4" Stud, Gear Cover           | 10        |

| #   | P/N      | DESCRIPTION                                       | QTY REQ'D |
|-----|----------|---|-----------|
| 36  | 7610     | Retaining Ring, Lower Shaft                       | 1         |
| 37  | 5003     | Heat Treated Lower Shaft                          | 1         |
| 38  | 7390     | Front Ball Bearing, Lower Shaft                   | 1         |
| 39  | 7413     | O'Ring, Seal Plate                                | 1         |
| 40  | 7652     | Retaining Ring, Seal Plate (.750" Seal)           | 1         |
| 41  | 7204T    | Seal, Seal Plate (Thick Seal .750")               | 1         |
| 42  | 7474     | O'Ring, Seal                                      | 1         |
| 43  | 5018-01M | Seal Plate, .750" Seal                            | 1         |
| 44  | 7114     | 3/8" SAE Flatwasher                               | 6         |
| 45  | 7107     | 3/8-16 x 1 1/4" HHCS, Seal Plate                  | 6         |
| 47* | 3533     | Drive Yoke, 1310, Steel                           | 1         |
| 47* | 5038AS   | Drive Yoke, 1310, Billet Aluminum                 | 1         |
| 47* | 3588     | Drive Yoke, 1350, Steel                           | 1         |
| 48  | 5037     | Retaining Washer, Drive Yoke                      | 1         |
| 49  | 7109Y    | 3/8-24 x 1" HHCS, Drive Yoke                      | 1         |
| 50  | 7176     | 7/16-20 x 5 1/2" Thrubolt                         | 10        |
| 51  | 7178     | 7/16" SAE Flatwasher, Thrubolt                    | 22        |
| 52  | 7177     | 7/16-20 Flanged Locknut, Thrubolt                 | 10        |
| 53  | 7117     | 7/16-14 x 1 1/4" HHCS                             | 2         |
| 60  | 7454     | O'Ring, Plug                                      | 1         |
| 61  | 6857     | Inspection Plug                                   | 1         |
| 62* | 2493     | Champ Adapter Bell, Early Ford® Steel Tube & Bell | 2         |
| 62* | 2493-01  | Champ Adapter Bell, Winters Steel Tube & Bell     | 2         |
| 63† | SR4910C  | Steel Tube & Bell with Big Bearing                | 2         |
| 63† | SR4915C  | Steel Tube & Bell with Big Bearing (Torino®)      | 2         |
| 65† | 7451     | 8 3/8" Side Bell O'Ring                           | 2         |
| 66† | SR4933   | Seal Adapter                                      | 2         |
| 67† | SR8376   | Seal  | 2         |
| 68† | SR8378   | Retaining Ring                                    | 2         |
| 69† | SR7468   | O'Ring  | 6         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. † Steel Tube & Bell Assembly.



# CHAMP ADAPTER

**SR3600** "Sprint" Center with Champ Adapter Bells

**\*SR2520STB** Big Bearing Flanged Axle

**\*SR2525STB** Big Bearing Flanged Axle (Torino®)

\* Steel Tube & Bell Assembly

See pages 70-72 for Set-Up Instructions

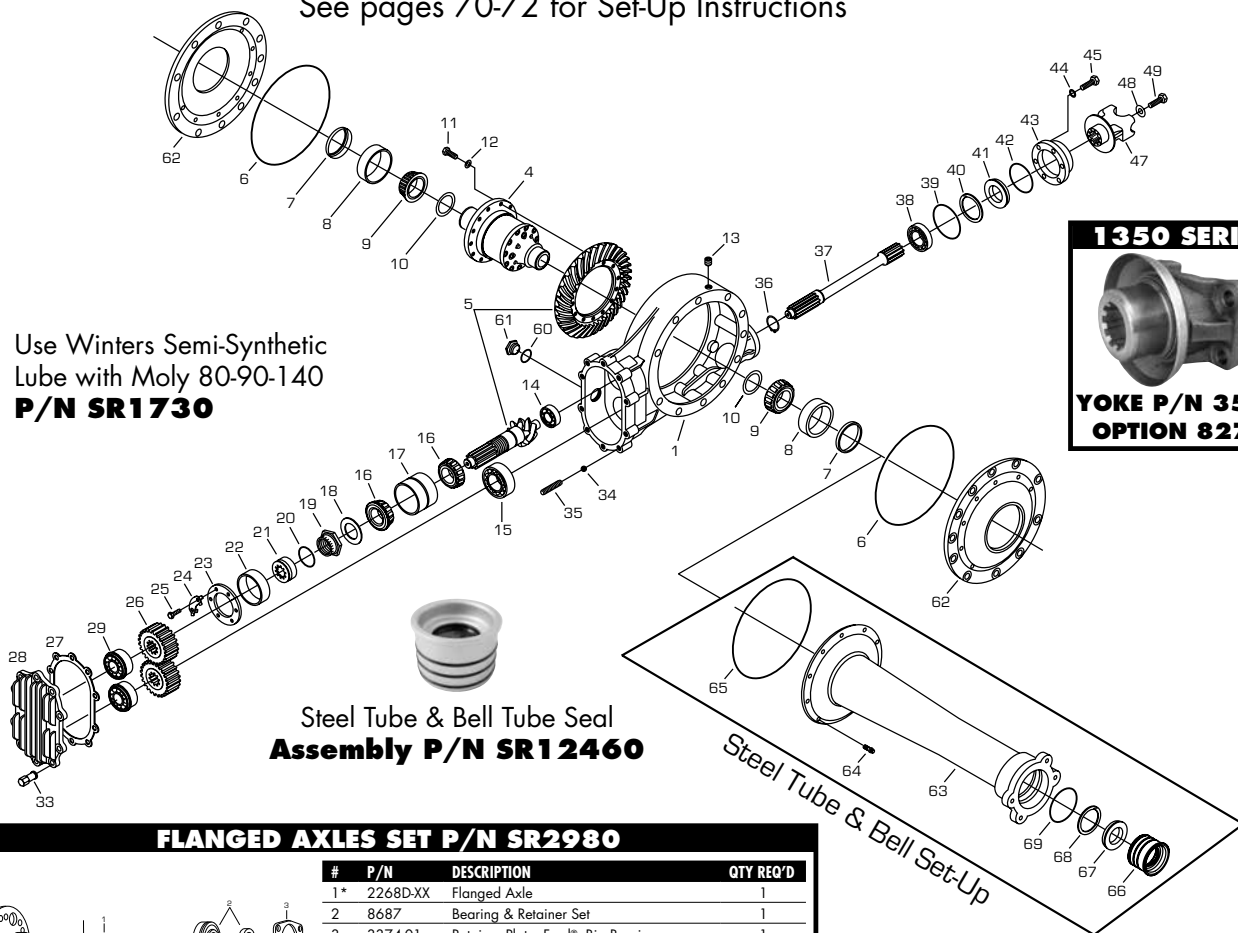


Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

**1350 SERIES**

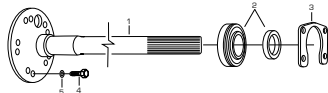


**YOKE P/N 3588  
OPTION 8275**



Steel Tube & Bell Tube Seal  
**Assembly P/N SR12460**

## FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

# CHAMP ADAPTER

51

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #  | P/N    | DESCRIPTION                                | QTY REQ'D |
|----|--------|--|-----------|
| 1  | 5840   | Aluminum "Sprint" Center Section           | 1         |
| 4  | 2419   | Winters Track, 31 Spline                   | 1         |
| 5  | 5714   | Ring & Pinion, 4.12 Standard               | 1         |
| 6  | 7403T  | O'Ring, 4 & 6 Rib Bell                     | 2         |
| 7  | 7205   | Seal, Side Bell                            | 2         |
| 8  | 7357   | Bearing Cup, Side Bell                     | 2         |
| 9  | 7358   | Bearing Cone                               | 2         |
| 10 | 6115   | Shim Kit                                   | 1         |
| 11 | 7852   | Ring Gear Bolt, Threaded Ring Gear         | 12        |
| 12 | 7815   | 3/8" Belleville Washer, Threaded Ring Gear | 12        |
| 13 | 7111B  | 3/8" Recessed Socket Head Pipe Plug        | 2         |
| 14 | 7331   | Roller Bearing, Pinion Nose                | 1         |
| 15 | 7339   | Shielded Ball Bearing, Lower Shaft         | 1         |
| 16 | 7308   | Bearing Cone, Pinion Shaft                 | 2         |
| 17 | 7307   | Double Bearing Cup, Pinion Shaft           | 1         |
| 18 | 5055   | Bearing Washer                             | 1         |
| 19 | 6485R  | Posi-Lock Nut, Pinion Shaft                | 1         |
| 20 | 7445   | O'Ring, Posi-Lock                          | 1         |
| 21 | 6484   | Posi-Lock Retainer, Pinion Shaft           | 1         |
| 22 | 5020   | Retaining Ring, Pinion                     | 1         |
| 23 | 6296A  | Retaining Plate, Pinion                    | 1         |
| 24 | 2374   | Lock Tab                                   | 3         |
| 25 | 7110   | 3/8-16 x 1" HHCS, Retaining Plate          | 6         |
| 26 | 8500   | Quick Change Gear Set                      | 1         |
| 27 | 6729HD | Gasket, Gear Cover, HD                     | 1         |
| 28 | 6508   | Gear Cover                                 | 1         |
| 29 | 7332   | Ball Bearing, Gear Cover                   | 2         |
| 33 | 7794   | 3/8-16 Steel High Nut                      | 10        |

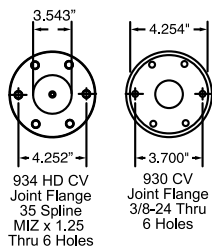
| #   | P/N      | DESCRIPTION                                       | QTY REQ'D |
|-----|----------|---|-----------|
| 34  | 7398     | 5/16" Diameter Ball, Gear Cover                   | 10        |
| 35  | 7802     | 3/8-16 x 1 3/4" Stud, Gear Cover                  | 10        |
| 36  | 7610     | Retaining Ring, Lower Shaft                       | 1         |
| 37  | 5003     | Heat Treated Lower Shaft                          | 1         |
| 38  | 7390     | Front Ball Bearing, Lower Shaft                   | 1         |
| 39  | 7413     | O'Ring, Seal Plate                                | 1         |
| 40  | 7652     | Retaining Ring, Seal Plate (.750" Seal)           | 1         |
| 41  | 7204T    | Seal, Seal Plate (Thick Seal .750")               | 1         |
| 42  | 7474     | O'Ring, Seal                                      | 1         |
| 43  | 5018-01M | Seal Plate, .750" Seal                            | 1         |
| 44  | 7114     | 3/8" SAE Flatwasher                               | 6         |
| 45  | 7107     | 3/8-16 x 1 1/4" HHCS, Seal Plate                  | 6         |
| 47* | 3533     | Drive Yoke, 1310, Steel                           | 1         |
| 47* | 5038AS   | Drive Yoke, 1310, Billet Aluminum                 | 1         |
| 47* | 3588     | Drive Yoke, 1350, Steel                           | 1         |
| 48  | 5037     | Retaining Washer, Drive Yoke                      | 1         |
| 49  | 7109Y    | 3/8-24 x 1" HHCS, Drive Yoke                      | 1         |
| 60  | 7454     | O'Ring, Plug                                      | 1         |
| 61  | 6857     | Inspection Plug                                   | 1         |
| 62* | 2493     | Champ Adapter Bell, Early Ford® Steel Tube & Bell | 2         |
| 62* | 2493-01  | Champ Adapter Bell, Winters Steel Tube & Bell     | 2         |
| 63† | SR4900   | Steel Tube & Bell Assembly                        | 2         |
| 64† | 8060     | 12pt Side Bell Bolts                              | 20        |
| 65† | 7451     | 8 3/8" Side Bell O'Ring                           | 2         |
| 66† | SR4933   | Seal Adapter                                      | 2         |
| 67† | SR8376   | Seal  | 2         |
| 68† | SR8378   | Retaining Ring                                    | 2         |
| 69† | SR7468   | O'Ring  | 6         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. † Steel Tube & Bell Assembly.

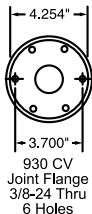
# CHAMPIONSHIP INDEPENDENT

## SRP437 10" Independent SRP437NQ 10" Non-Quick Change SRP337 10" Independent w/Aluminum Spool

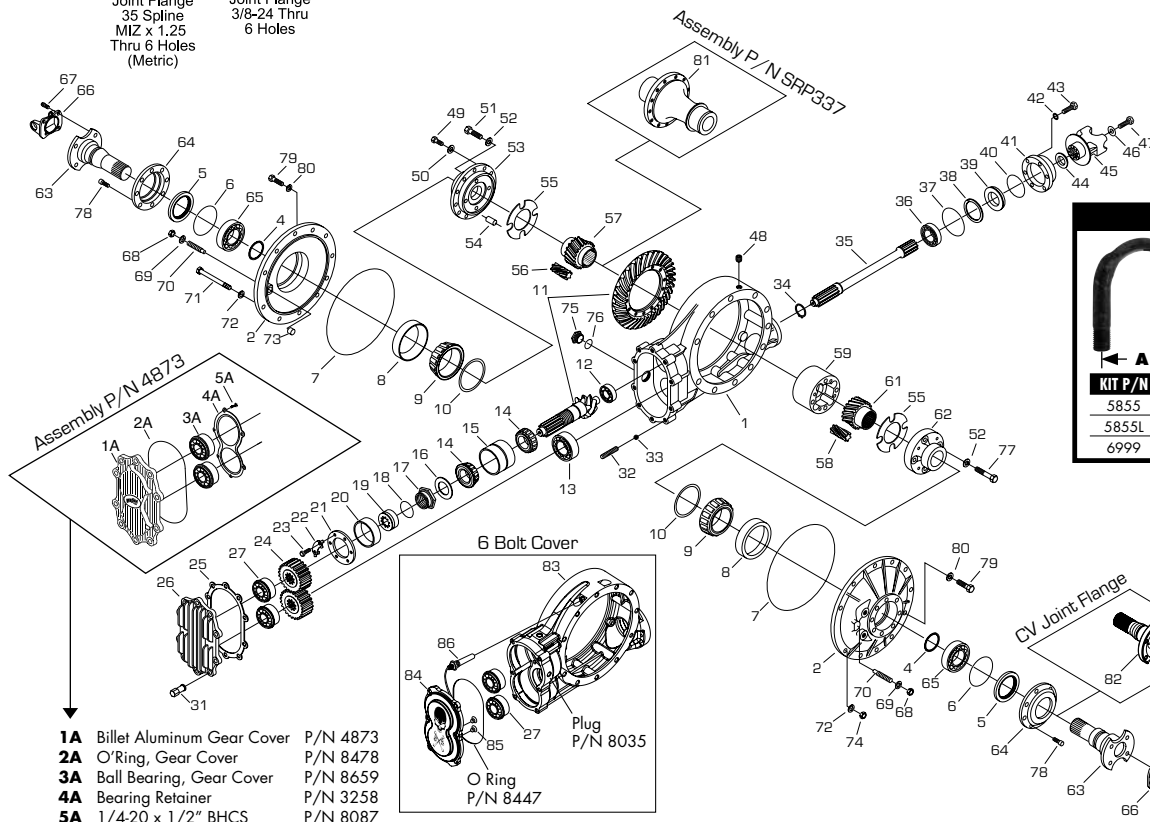
See page 73 for Set-Up Instructions



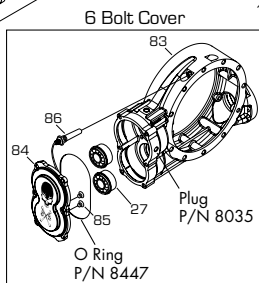
934 HD CV  
Joint Flange  
35 Spline  
M12 x 1.25  
Thru 6 Holes  
(Metric)



930 CV  
Joint Flange  
3/8-24 Thru  
6 Holes



- 1A Billet Aluminum Gear Cover P/N 4873  
2A O'Ring, Gear Cover P/N 8478  
3A Ball Bearing, Gear Cover P/N 8659  
4A Bearing Retainer P/N 3258  
5A 1/4-20 x 1/2" BHCS P/N 8087



6 Bolt Cover

- Plug P/N 8035  
O Ring P/N 6447

### WINTERS TRACK



**P/N SR2418-31** 31 Spline **P/N SR2418-35** 35 Spline  
Our 31 Spline Winters Track Differential is standard equipment in all Championship Independent Assemblies. CNC machined to exacting tolerances. This virtually unbreakable, parallel gear design automatically senses wheel spin and delivers positive traction.

### 1350 SERIES



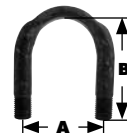
**YOKE P/N 3566**  
**OPTION 8275**

### 1350 SERIES



**YOKE P/N 3588**  
**OPTION 8275**

### U-BOLT KITS



#### KIT INCLUDES

- 2 - U-Bolts
- 4 - Lock Washers
- 4 - Hex Nuts
- Torque: 15 Ft Lbs

| KIT P/N | A      | B      | SERIES | JOURNAL DIA. |
|---------|--------|--------|--------|--------------|
| 5855    | 1.406" | 1.684" | 1310   | 1 1/16"      |
| 5855L   | 1.406" | 1.934" | 1310   | 1 1/16"      |
| 6999    | 1.640" | 2.000" | 1350   | 1 3/16"      |

### JOURNAL ASSEMBLY



- P/N 5382** 1310 Series  
1 1/16" Dia w/ Grease Fitting
- P/N 6847** 1310 Series  
1 1/16" Dia w/o Grease Fitting
- P/N 6996** 1350 Series  
1 3/16" Dia w/ Grease Fitting

### 31 & 35 SPLINE OUTPUT FLANGE



- SR2944-31** Output Flange, 31 Spline, Porsche®  
930 Style CV Joint
- SR2944-35** Output Flange, 35 Spline, Porsche®  
930 Style CV Joint
- SR4874-01** Output Flange, 35 Spline HD 934 Style CV Joint

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

# CHAMPIONSHIP INDEPENDENT

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| #    | P/N      | DESCRIPTION                                | QTY REQ'D |
|------|----------|--|-----------|
| 1    | 5840     | Aluminum "Sprint" Center Section           | 1         |
| 2    | 2928     | Side Bell                                  | 2         |
| 4    | 7619     | Retaining Ring                             | 2         |
| 5    | 7236     | Seal, Side Bell                            | 2         |
| 6    | 7413     | O'Ring, Side Bell Seal                     | 2         |
| 7    | 7403T    | O'Ring, Side Bell                          | 2         |
| 8    | 7357     | Bearing Cup, Side Bell                     | 2         |
| 9    | 7358     | Bearing Cone, Differential                 | 2         |
| 10   | 6115     | Shim Kit                                   | 1         |
| 11   | 5714     | Ring & Pinion, 4.12 Standard               | 1         |
| 12   | 7331     | Roller Bearing, Pinion Nose                | 1         |
| 13   | 7339     | Shielded Ball Bearing, Lower Shaft         | 1         |
| 14   | 7308     | Bearing Cone, Pinion Shaft                 | 2         |
| 15   | 7307     | Double Bearing Cup, Pinion Shaft           | 1         |
| 16   | 5055     | Bearing Washer, Pinion                     | 1         |
| 17   | 6485R    | Posi-Lock Nut                              | 1         |
| 18   | 7445     | O'Ring, Posi-Lock Retainer                 | 1         |
| 19   | 6484     | Posi-Lock Retainer                         | 1         |
| 20   | 5020     | Retaining Ring                             | 1         |
| 21   | 6296A    | Retainer Plate                             | 1         |
| 22   | 2374     | Lock Tab                                   | 3         |
| 23   | 7110     | 3/8-16 x 1" HHCS                           | 6         |
| 24   | 8500     | Quick Change Gear Set                      | 1         |
| 25   | 6729HD   | Gasket, Gear Cover, HD                     | 1         |
| 26   | 6508     | Gear Cover                                 | 1         |
| 27   | 8659     | Double Roller Ball Bearing w/Snap Ring     | 2         |
| 31   | 7794     | 3/8-16 Steel High Nut                      | 10        |
| 32   | 7802     | 3/8-16 x 1 3/4" Stud, Gear Cover           | 10        |
| 33   | 7398     | 5/16" Diameter Steel Ball, Gear Cover Stud | 10        |
| 34   | 7610     | Retaining Ring, Lower Shaft                | 1         |
| 35   | 5003     | Heat Treated Lower Shaft, 10 Spline        | 1         |
| 35   | 5003-32  | Lower Shaft, Heat Treated, 32 Spline       | 1         |
| 35   | 5003-V   | Lower Shaft, Vascomax®, 10 Spline          | 1         |
| 35   | 5003V-32 | Lower Shaft, Vascomax®, 32 Spline          | 1         |
| 36   | 7390     | Ball Bearing, Lower Shaft                  | 1         |
| 37   | 7413     | O'Ring, Seal Plate                         | 1         |
| 38   | 7653     | Retaining Ring, Seal Plate                 | 1         |
| 39   | 7204T    | Seal, Seal Plate                           | 1         |
| 40   | 7474     | O'Ring, Seal                               | 1         |
| 41   | 5018-01M | Seal Plate, .750" Seal (.375" P/N 5018M)   | 1         |
| 42   | 7114     | 3/8" SAE Flatwasher                        | 6         |
| 43   | 7107     | 3/8-16 x 1 1/4" HHCS                       | 6         |
| 44** | 6532     | Spacer, Drive Yoke                         | 1         |
| 45*  | 3533     | Drive Yoke, 1310, Steel                    | 1         |
| 45*  | 3566     | Drive Yoke, 1350, Steel, 32 Spline         | 1         |
| 45*  | 3588     | Drive Yoke, 1350, Steel, 10 Spline         | 1         |

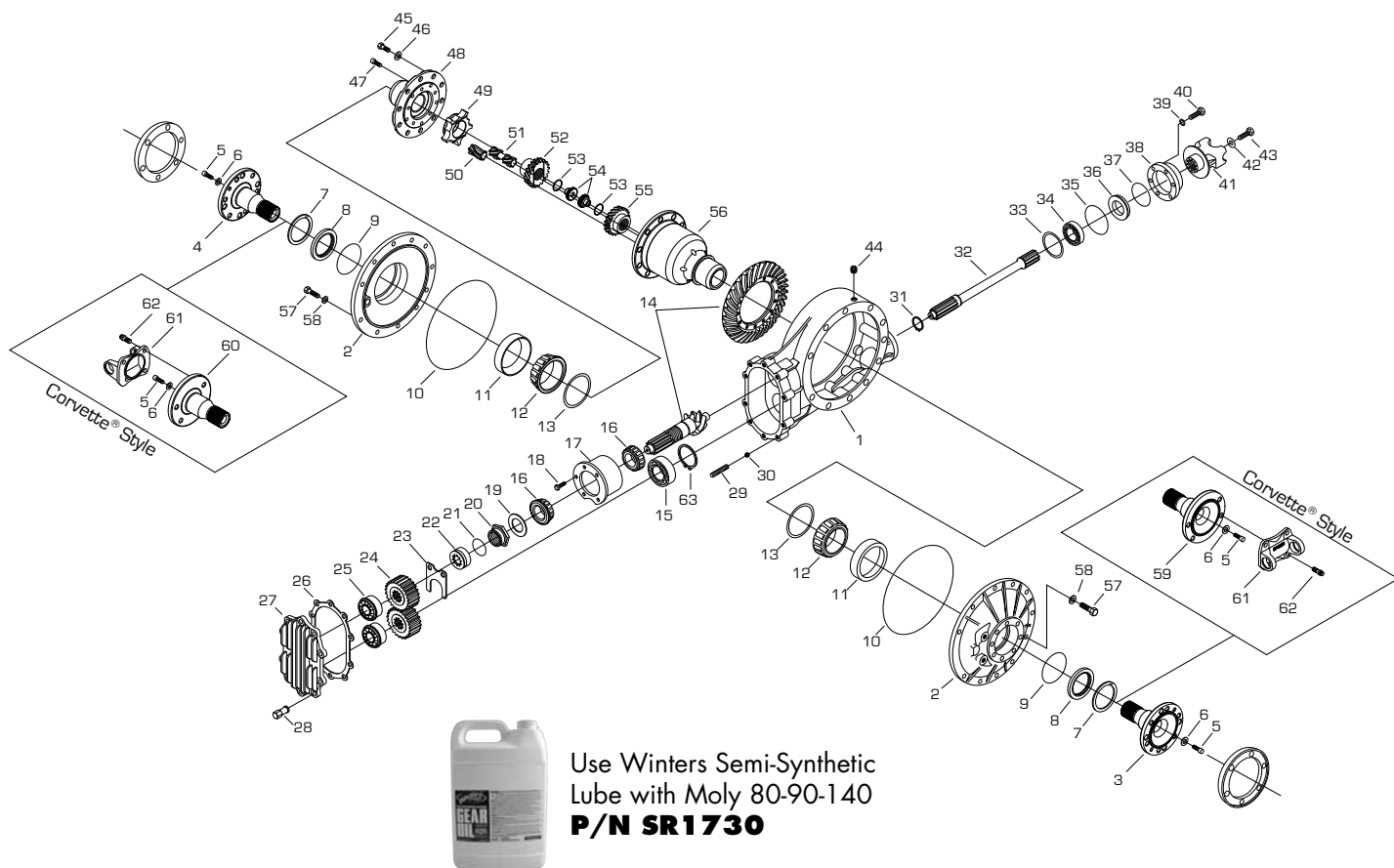
| #                   | P/N       | DESCRIPTION   | QTY REQ'D |
|---------------------|-----------|---|-----------|
| 46                  | 5037      | Retaining Washer, Drive Yoke                          | 1         |
| 47                  | 7109Y     | 3/8-24 x 1" HHCS                                      | 1         |
| 48                  | 7111A     | Plug  | 1         |
| 49                  | 7852      | Ring Gear Bolt, Threaded Ring Gear                    | 12        |
| 50                  | 7815      | 3/8" Belleville Washer, Threaded Ring Gear            | 12        |
| 51                  | 7113      | 1/2-20 x 2" HHCS                                      | 4         |
| 52                  | 8005      | 1/2" Belleville Washer                                | 8         |
| 53                  | 2940      | Housing End, Ring Gear Side                           | 1         |
| 54                  | 1459-01   | Sleeve  | 4         |
| 55                  | 6315-01   | Wear Plate  | 2         |
| 56                  | 6329-02   | Pinion Gear, Left Hand                                | 4         |
| 57*                 | 6330-01   | Side Gear, Left Hand, 31 Spline                       | 1         |
| 57*                 | 6330-35L  | Side Gear, Left Hand, 35 Spline                       | 1         |
| 58                  | 6329-01   | Pinion Gear, Right Hand                               | 4         |
| 59                  | 6361      | Central Housing                                       | 1         |
| 61*                 | 6330-02   | Side Gear, Right Hand, 31 Spline                      | 1         |
| 61*                 | 6330-35R  | Side Gear, Right Hand, 35 Spline                      | 1         |
| 62                  | 2941      | Housing Cover   | 1         |
| 63*                 | 2943-31   | Output Flange, Corvette Style                         | 2         |
| 64                  | 2945      | Seal Plate, Output Flange                             | 2         |
| 65                  | 7531      | Bearing (Remove Shields)                              | 2         |
| 66                  | 6320      | Yoke, For Use With 2943-31 Only 1350 Series           | 2         |
| 67                  | 7740      | 7/16-20 x 3/4" 12pt                                   | 8         |
| 68                  | 7137      | 1/2-13 Jam Nut, Adjusting Screw                       | 2         |
| 69                  | 7167      | 1/2" Flatwasher                                       | 2         |
| 70                  | 6149      | 1/2-13 Adjusting Screw                                | 2         |
| 71                  | 7176      | 7/16-20 x 5 1/2" HHCS                                 | 10        |
| 72                  | 7177      | 7/16" SAE Flatwasher                                  | 22        |
| 73                  | 5010      | Thrust Block  | 1         |
| 74                  | 7177N     | 7/16-20 Flanged Locknut                               | 10        |
| 75                  | 6857-01   | Small Inspection Plug                                 | 1         |
| 76                  | 7454      | O'Ring, Inspection Plug                               | 1         |
| 77                  | 8058      | 1/2-20 x 1 1/2" HHCS                                  | 4         |
| 78                  | 7195      | Bolt  | 16        |
| 79                  | 7117      | 7/16-14 X 1 1/4" HHCS                                 | 2         |
| 80                  | 7178      | 7/16" SAE Flatwasher                                  | 2         |
| 81*                 | SR3353-31 | Aluminum Spool, 31 Spline                             | 1         |
| 81*                 | SR3353-35 | Aluminum Spool, 35 Spline                             | 1         |
| 82*                 | SR2944-31 | Output Flange, 31 Spline, Porsche® 930 Style CV Joint | 2         |
| 82*                 | SR2944-35 | Output Flange, 35 Spline, Porsche® 930 Style CV Joint | 2         |
| 82*                 | SR4874-01 | Output Flange, 35 Spline HD 934 Style CV Joint        | 2         |
| <b>6 BOLT COVER</b> |           |   |           |
| 83                  | 12088     | Aluminum 6 Bolt Center                                | 1         |
| 84                  | 12175     | Billet Aluminum 6 Bolt Gear Cover                     | 1         |
| 85                  | 12417     | Bearing Retainer                                      | 2         |
| 86                  | 2966-02   | Breather Assembly (Sold Separately)                   | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. \*\* Used only with P/N 5038AS.

# V8 INDEPENDENT

**SRP437-838** 8 3/8" w/Wedgelock  
**SRP437-838NQ** 8 3/8" Non-Quick Change

See page 73 for Set-Up Instructions





| #  | P/N     | DESCRIPTION                                | QTY REQ'D |
|----|---------|--|-----------|
| 1  | 2524HD  | Aluminum V8 Center Section                 | 1         |
| 2  | 4658    | Side Bell                                  | 2         |
| 3  | 4610-01 | Output Flange, Right                       | 1         |
| 4  | 4610-02 | Output Flange, Left, Long                  | 1         |
| 5  | 9363    | 7/16-20 x 3" SHCS                          | 2         |
| 6  | 7921    | Belleville Washer                          | 2         |
| 7  | 8390    | Retaining Ring                             | 2         |
| 8  | 8976V   | Seal, Side Bell                            | 2         |
| 9  | 8419    | O'Ring, Side Bell Seal                     | 2         |
| 10 | 7451    | O'Ring, Side Bell                          | 2         |
| 11 | 7302    | Bearing Cup, Side Bell                     | 2         |
| 12 | 7301    | Bearing Cone, Differential                 | 2         |
| 13 | 6709    | Shim Kit                                   | 1         |
| 14 | 6811    | Ring & Pinion, 3.78 Standard               | 1         |
| 15 | 7534    | Shielded Ball Bearing, Lower Shaft         | 1         |
| 16 | 7527    | Bearing Cone, Pinion Shaft                 | 2         |
| 17 | 7525    | Double Bearing Cup, Pinion Shaft           | 1         |
| 18 | 9308    | 3/8-16 x 1" HHCS (Torx®)                   | 6         |
| 19 | 6824    | Bearing Washer, Pinion                     | 1         |
| 20 | 6821    | Posi-Lock Nut                              | 1         |
| 21 | 7455    | O'Ring, Posi-Lock Retainer                 | 1         |
| 22 | 6822    | Posi-Lock Retainer                         | 1         |
| 23 | 6751    | Bearing Retainer, Pinion                   | 1         |
| 24 | 4500    | Quick Change Gear Set, 1 3/8" Wide         | 1         |
| 25 | 7532-01 | Double Roller Ball Bearing w/Snap Ring     | 2         |
| 26 | 6703HD  | Gasket, Gear Cover, HD                     | 1         |
| 27 | 3056    | Gear Cover                                 | 1         |
| 28 | 7794    | 3/8-16 Steel High Nut                      | 10        |
| 29 | 7802    | 3/8-16 x 1 3/4" Stud, Gear Cover           | 10        |
| 30 | 7398    | 5/16" Diameter Steel Ball, Gear Cover Stud | 10        |
| 31 | 7658    | Retaining Ring, Lower Shaft                | 1         |
| 32 | 6881-01 | Heat Treated Lower Shaft                   | 1         |

| #   | P/N       | DESCRIPTION                                | QTY REQ'D |
|-----|-----------|--|-----------|
| 33  | 6680      | Steel Spacer, Bearing                      | 1         |
| 34  | 7390      | Ball Bearing, Lower Shaft                  | 1         |
| 35  | 7413      | O'Ring, Seal Plate                         | 1         |
| 36  | 7204      | Seal, Seal Plate                           | 1         |
| 37  | 7474      | O'Ring, Seal                               | 1         |
| 38  | K6854-01M | Seal Plate, .750" Seal (.375" P/N 5018M)   | 1         |
| 39  | 7114      | 3/8" SAE Flatwasher                        | 6         |
| 40  | 7110      | 3/8-16 x 1 1/4" HHCS                       | 6         |
| 41* | 5038      | Drive Yoke, Steel                          | 1         |
| 41* | 5038AS    | Drive Yoke, Aluminum                       | 1         |
| 42  | 5037      | Retaining Washer, Drive Yoke               | 1         |
| 43  | 7109Y     | 3/8-24 x 1" HHCS                           | 1         |
| 44  | 7111B     | 3/8" Pipe Plug                             | 1         |
| 45  | 7852      | Ring Gear Bolt, Threaded Ring Gear         | 10        |
| 46  | 7815      | 3/8" Belleville Washer, Threaded Ring Gear | 10        |
| 47  | 8796      | 1/4-28 x 1" 12pt                           | 5         |
| 48  | 1688      | Cover, Wedgelock Differential              | 1         |
| 49  | 1996      | Scalloped Spacer                           | 1         |
| 50  | 1692-01   | Pinion Gear, Short                         | 5         |
| 51  | 1692-02   | Pinion Gear, Long                          | 5         |
| 52  | 1693-31A  | Side Gear, Left, 31 Spline                 | 1         |
| 53  | 8336      | Retaining Ring, Side Gear Insert           | 2         |
| 54  | 4639      | Insert, Side Gear                          | 2         |
| 55  | 1693-31B  | Side Gear, Right, 31 Spline                | 1         |
| 56  | 1687      | Main Housing, Wedgelock Differential       | 1         |
| 57  | 7953      | 3/8-16 X 1 1/4" HHCS (Torx®)               | 2         |
| 58  | 7151      | 3/8" SAE Flatwasher                        | 2         |
| 59  | 4846-01   | Output Flange, Right, Corvette Style       | 1         |
| 60  | 4846-02   | Output Flange, Left, Long, Corvette Style  | 1         |
| 61  | 3453-01   | Yoke                                       | 2         |
| 62  | 7740      | 7/16-20 x 3/4" 12pt                        | 8         |
| 63  | 7655      | Retaining Ring, Rear Bearing               | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. \*\* Used only with P/N 5038AS.

# V8 QUICK CHANGE

**SR2220** Big Bearing Flanged Axle

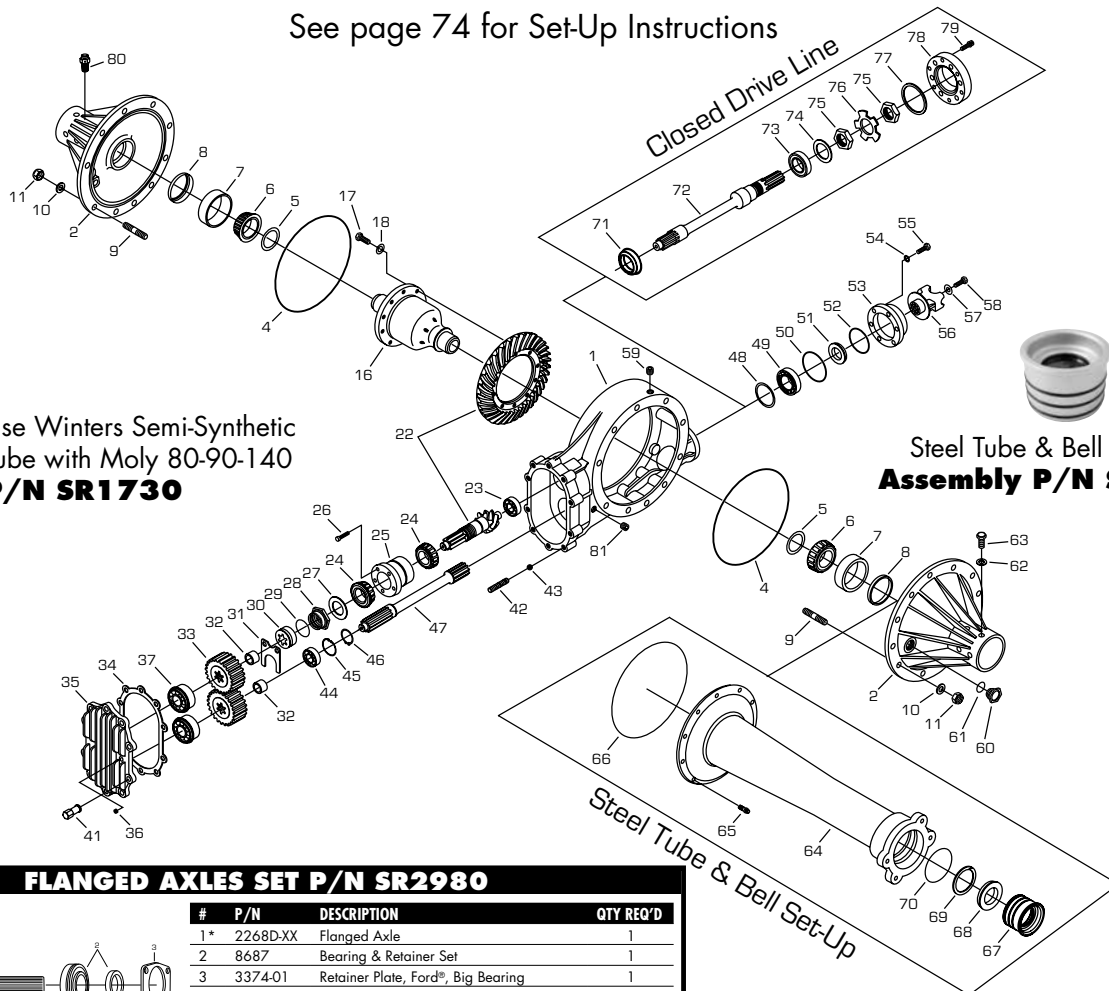
**SR2550** Big Bearing Flanged Axle (Torino®)

**\*SR2220STB** Big Bearing Flanged Axle

**\*SR2550STB** Big Bearing Flanged Axle (Torino®)

\* Steel Tube & Bell Assembly

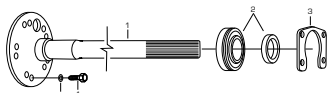
See page 74 for Set-Up Instructions



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

Steel Tube & Bell Tube Seal  
**Assembly P/N SR12460**

## FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

# V8 QUICK CHANGE

57

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N     | DESCRIPTION                        | QTY REQ'D |
|-----|---------|------------------------------------|-----------|
| 1   | 2524HD  | Aluminum Center Section            | 1         |
| 2   | 3180    | Aluminum Side Bell                 | 2         |
| 4   | 7451    | O'Ring, Side Bell                  | 2         |
| 5   | 5295    | Shim Kit                           | 1         |
| 6   | 7340    | Bearing Cone                       | 2         |
| 7   | 7310    | Bearing Cup, Side Bell             | 2         |
| 8   | 7205    | Seal, Side Bell                    | 2         |
| 9*  | 7905    | 3/8-16 x 2" Stud                   | 20        |
| 10* | 7916    | 3/8" Belleville Washer             | 20        |
| 11* | 7885    | 3/8-16 Nylon Lock Nut              | 20        |
| 16  | 1792-31 | Wedgelock                          | 1         |
| 17* | 7852    | 3/8-24 Ring Gear Bolt              | 10        |
| 18* | 7815    | 3/8" Belleville Washer             | 10        |
| 22  | 6811    | Ring & Pinion, 3.78 Standard       | 1         |
| 23  | 7392    | Ball Bearing, Pinion Nose          | 1         |
| 24  | 7527    | Bearing Cone, Pinion Shaft         | 2         |
| 25  | 7525    | Flanged Double Cup, Pinion Shaft   | 1         |
| 26  | 7878    | 3/8-16 x 1" BHCS                   | 5         |
| 27  | 6824    | Bearing Washer, Pinion             | 1         |
| 28  | 6821    | Pinion Nut                         | 1         |
| 29  | 7455    | O'Ring, Pinion Nut                 | 1         |
| 30  | 6822    | Pinion Nut Retainer                | 1         |
| 31  | 6751    | Bearing Retainer                   | 1         |
| 32  | 1372    | Gear Spacer, For 1" Gears Only     | 2         |
| 33  | 4500    | Quick Change Gear Set, 1 3/8" Wide | 1         |
| 34  | 6703    | Gasket, Gear Cover, HD             | 1         |
| 35  | 3056    | Gear Cover                         | 1         |
| 36  | 7874    | #6 AN Port Plug                    | 3         |
| 37  | 7532-01 | Bearing, Gear Cover                | 2         |
| 41  | 7794    | 3/8-16 Steel High Nut              | 10        |
| 41† | 7735    | Gear Cover Bolts                   | 10        |
| 42  | 7802    | 3/8-16 x 1 3/4" Stud               | 10        |
| 43  | 7398    | 5/16" Diameter Steel Ball          | 10        |
| 44  | 7534    | Bearing, Lower Shaft (Rear)        | 1         |
| 45  | 7655    | Retaining Ring, Rear Bearing       | 1         |
| 46  | 7658    | Retaining Ring, Lower Shaft        | 1         |
| 47* | 6881-03 | Heat Treated Lower Shaft           | 1         |

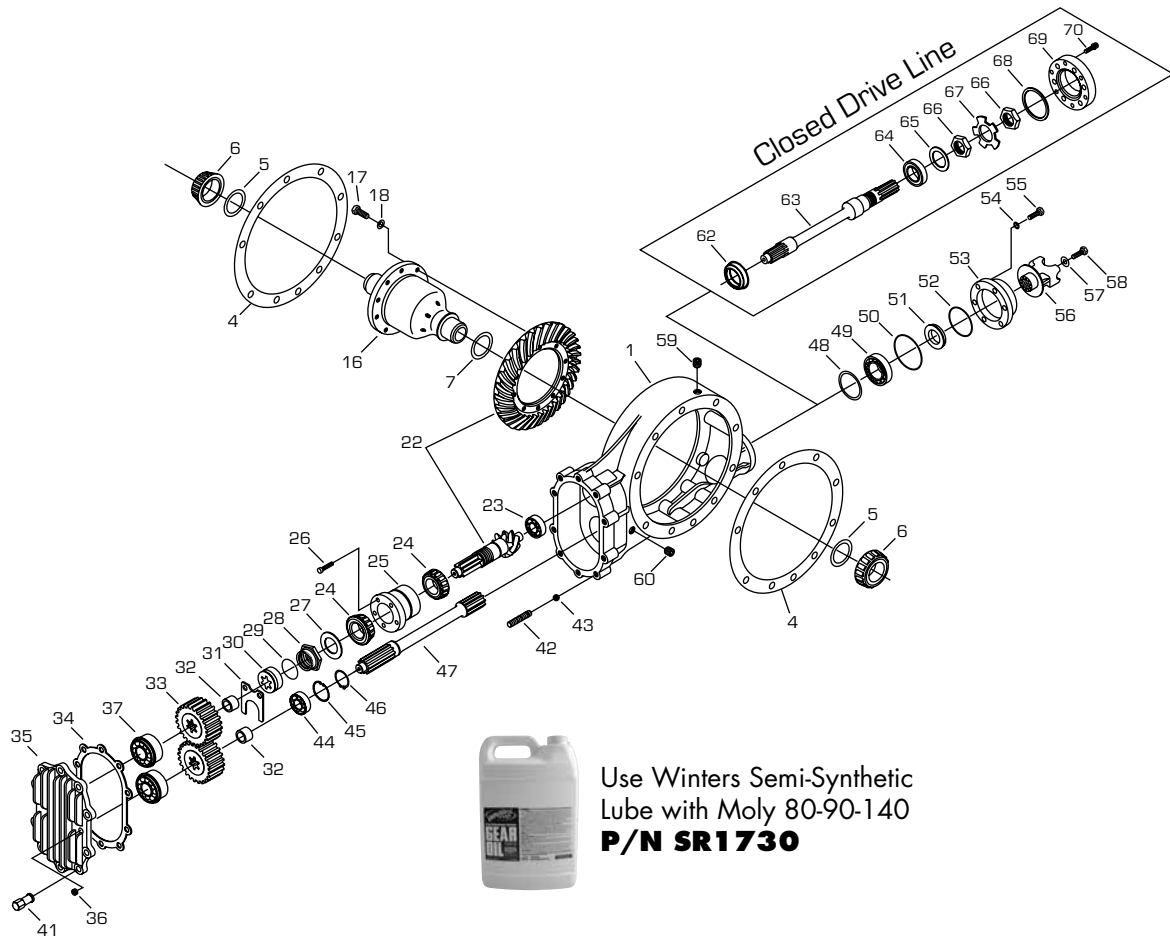
| #   | P/N      | DESCRIPTION                               | QTY REQ'D |
|-----|----------|---|-----------|
| 48  | 6680     | Spacer                                    | 1         |
| 49  | 7390     | Bearing, Lower Shaft                      | 1         |
| 50  | 7413     | O'Ring, Seal Plate                        | 1         |
| 51  | 7204T    | Seal, Seal Plate (Thick Seal .750")       | 1         |
| 52  | 7474     | Internal O'Ring, Seal Plate               | 1         |
| 53  | 6854S    | Seal Plate                                | 1         |
| 54  | 7114     | 3/8" Flatwasher                           | 6         |
| 55  | 7110     | 3/8-16 x 1" HHCS                          | 6         |
| 56* | 5038     | Drive Yoke, 1310, Steel                   | 1         |
| 56* | 5038AS   | Drive Yoke, 1310, Aluminum                | 1         |
| 56* | 3588M    | Drive Yoke, 1350, Steel                   | 1         |
| 57  | 5037     | Retaining Washer, Drive Yoke              | 1         |
| 58  | 7109Y    | 3/8-24 x 1" HHCS                          | 1         |
| 59  | 7111B    | 3/8" Socket Pipe Plug                     | 3         |
| 60  | 6857     | Small Inspection Plug w/O'Ring            | 1         |
| 61  | 7454     | O'Ring, Small Inspection Plug             | 1         |
| 62  | 7114     | 3/8" SAE Flatwasher                       | 16        |
| 63  | 7109S    | 3/8-24 x 3/4" HHCS                        | 16        |
| 64† | SR4900   | Steel Tube & Bell Assembly                | 2         |
| 65† | 7735     | Side Bell Bolts                           | 20        |
| 66† | 7451     | 8 3/8" Side Bell O'Ring                   | 2         |
| 67† | SR4933   | Seal Adapter                              | 2         |
| 68† | SR8376   | Seal                                      | 2         |
| 69† | SR8378   | Retaining Ring                            | 2         |
| 70† | SR7468   | O'Ring                                    | 6         |
| 71* | 7280     | Seal, Lower Shaft                         | 1         |
| 72* | 3648-6L  | Lower Shaft, Closed Drive, 6 Spline       | 1         |
| 72* | 3648-10L | Lower Shaft, Closed Drive, 10 Spline      | 1         |
| 73* | 7383F    | Sealed Bearing                            | 1         |
| 74* | 5055-01  | Washer                                    | 1         |
| 75* | 5032R    | Locknut, Right Hand                       | 2         |
| 76* | 5056     | Lockwasher                                | 1         |
| 77* | 6680     | Spacer                                    | 1         |
| 78* | 3647     | Adapter Plate, Closed Drive               | 1         |
| 79* | 7713     | 3/8-16 x 1 1/4" 12pt                      | 6         |
| 80  | SR9341   | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |
| 81  | 9366     | 1/4-18 Socket Pipe Plug                   | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. † Steel Tube & Bell Assembly.

# V8 CENTER KIT

## SR3605 8 3/8" V8 Center Kit

See pages 75-76 for Set-Up Instructions



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

# V8 CENTER KIT

59

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #    | P/N       | DESCRIPTION                        | QTY REQ'D |
|------|-----------|------------------------------------|-----------|
| 1    | 2524HD-01 | Center Section                     | 1         |
| 4    | 4606      | Gasket, Side Bell                  | 2         |
| 5    | 3171      | Shim Kit                           | 1         |
| 6    | 8606      | Bearing Cone                       | 2         |
| 7    | 3097      | Spacer                             | 1         |
| 16   | 1792V     | Wedgelock                          | 1         |
| 17   | 7852      | 3/8-24 Ring Gear Bolt              | 10        |
| 18   | 7815      | 3/8" Belleville Washer             | 10        |
| 22   | 6811      | Ring & Pinion, 3.78 Standard       | 1         |
| 23   | 7392      | Ball Bearing, Pinion Nose          | 1         |
| 24   | 7527      | Bearing Cone, Pinion Shaft         | 2         |
| 25   | 7525      | Flanged Double Cup, Pinion Shaft   | 1         |
| 26   | 7878      | 3/8-16 x 1" BHCS                   | 5         |
| 27   | 6824      | Bearing Washer, Pinion             | 1         |
| 28   | 6821      | Pinion Nut                         | 1         |
| 29   | 7455      | O'Ring, Pinion Nut                 | 1         |
| 30   | 6822      | Pinion Nut Retainer                | 1         |
| 31   | 6751      | Bearing Retainer                   | 1         |
| 32   | 1372      | Gear Spacer, For 1" Gears Only     | 2         |
| 33** | 4400      | Quick Change Gear Set, 1" Wide     | 1         |
| 33** | 4500      | Quick Change Gear Set, 1 3/8" Wide | 1         |
| 34   | 6703HD    | Gasket, Gear Cover, HD             | 1         |
| 35   | 3056      | Gear Cover                         | 1         |
| 36   | 7874      | #6 AN Port Plug                    | 3         |
| 37   | 7532      | Bearing, Gear Cover                | 2         |
| 41   | 7794      | 3/8-16 Steel High Nut              | 10        |
| 42   | 7802      | 3/8-16 x 1 3/4" Stud               | 10        |
| 43   | 7398      | 5/16" Diameter Steel Ball          | 10        |
| 44   | 7534      | Bearing, Lower Shaft (Rear)        | 1         |

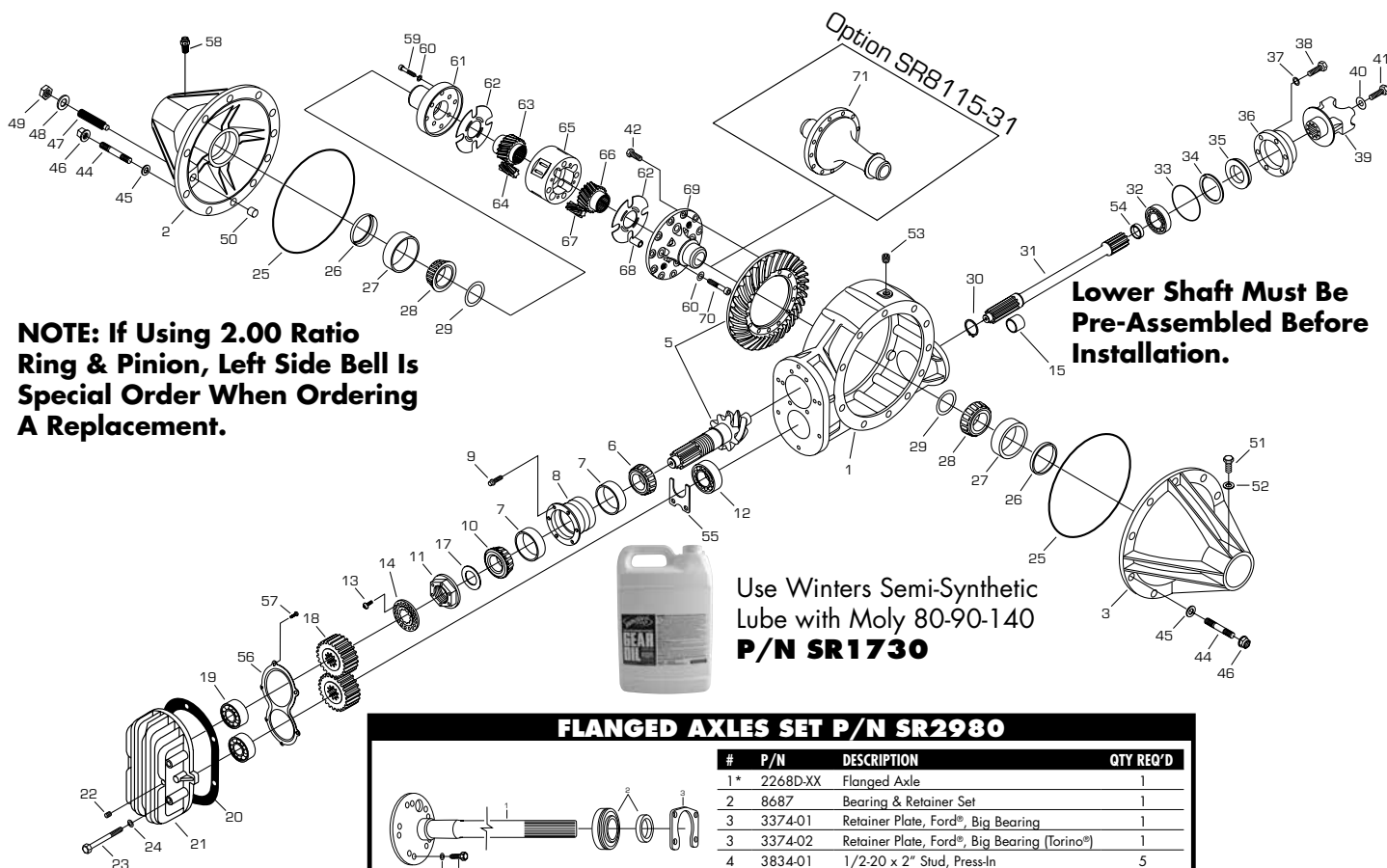
| #   | P/N      | DESCRIPTION                          | QTY REQ'D |
|-----|----------|--------------------------------------|-----------|
| 45  | 7655     | Retaining Ring, Rear Bearing         | 1         |
| 46  | 7658     | Retaining Ring, Lower Shaft          | 1         |
| 47  | 6881-03  | Lower Shaft, Heat Treated            | 1         |
| 48  | 6680     | Spacer                               | 1         |
| 49  | 7390     | Bearing, Lower Shaft                 | 1         |
| 50  | 7413     | O'Ring, Seal Plate                   | 1         |
| 51  | 7204T    | Seal, Seal Plate (Thick Seal .750")  | 1         |
| 52  | 7474     | Internal O'Ring, Seal Plate          | 1         |
| 53  | 6854S    | Seal Plate                           | 1         |
| 54  | 7114     | 3/8" Flatwasher                      | 6         |
| 55  | 7110     | 3/8-16 x 1" HHCS                     | 6         |
| 56* | 5038     | Drive Yoke, 1310, Steel              | 1         |
| 56* | 5038AS   | Drive Yoke, 1310, Aluminum           | 1         |
| 56* | 3588M    | Drive Yoke, 1350, Steel              | 1         |
| 57  | 5037     | Retaining Washer                     | 1         |
| 58  | 7109Y    | 3/8-24 x 1" HHCS                     | 1         |
| 59  | 7111B    | 3/8" Socket Pipe Plug                | 3         |
| 60  | 9366     | 1/4-18 Socket Pipe Plug              | 1         |
| 62* | 7280     | Seal, Lower Shaft                    | 1         |
| 63* | 3648-6L  | Lower Shaft, Closed Drive, 6 Spline  | 1         |
| 63* | 3648-10L | Lower Shaft, Closed Drive, 10 Spline | 1         |
| 64* | 7383F    | Sealed Bearing                       | 1         |
| 65* | 5055-01  | Washer                               | 1         |
| 66* | 5032R    | Locknut, Right Hand                  | 2         |
| 67* | 5056     | Lockwasher                           | 1         |
| 68* | 6680     | Spacer                               | 1         |
| 69* | 3647     | Adapter Plate, Closed Drive          | 1         |
| 70* | 7713     | 3/8-16 x 1 1/4" 12pt                 | 6         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. \*\* Not Included with Assembly.

# XTREMELINER

**SR3920** Big Bearing Flanged Axle  
**SR3925** Big Bearing Flanged Axle (Torino®)  
**SR3910** Super Speedway Hubs  
**SR3963** 2 1/2" Grand National Hubs  
**SR3975** 2 1/2" Wide 5 Hubs

See pages 70-72 for Set-Up Instructions





**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N       | DESCRIPTION                             | QTY REQ'D |
|-----|-----------|---|-----------|
| 1   | 5012-308  | Aluminum Center Section                 | 1         |
| 2   | 5016-02   | Aluminum HD 8 Rib Left Side Bell        | 1         |
| 3   | 5016-308  | Aluminum HD 8 Rib Right Side Bell       | 1         |
| 5*  | 25308     | Ring & Pinion, 3.08                     | 1         |
| 5*  | 25308RR   | Ring & Pinion, 3.08, Reverse Rotation   | 1         |
| 5*  | 25200     | Ring & Pinion, 2.00                     | 1         |
| 6   | 8634      | Front Cone                              | 1         |
| 7   | 8633      | Cup                                     | 2         |
| 8   | 3440      | Pinion Bearing Carrier                  | 1         |
| 9   | 7713      | 3/8-16 x 1 1/4" HHCS                    | 6         |
| 10  | 7308      | Rear Cone                               | 1         |
| 11  | 3179      | Pinion Nut                              | 1         |
| 12  | 7329      | Roller Bearing, Lower Shaft             | 1         |
| 13  | 7869      | 10-24 x 1/2" BHCS                       | 1         |
| 14  | 3178      | Pinion Nut Retainer                     | 1         |
| 15  | 3194      | Quick Change Gear Spacer                | 1         |
| 17  | 3308      | Washer                                  | 1         |
| 18  | 308       | Quick Change Gear Set (Not Included)    | 1         |
| 19  | 8659      | Ball Bearing, Gear Cover                | 2         |
| 20  | 1764-308  | Gasket, Gear Cover                      | 1         |
| 21* | 5017HD    | Aluminum Gear Cover, Less Bearings      | 1         |
| 22  | 7111B     | 3/8" SHCS Pipe Plug                     | 4         |
| 23* | 7108      | 3/8-16 x 4" HHCS, Gear Cover            | 6         |
| 24  | 7114      | 3/8" Flatwasher                         | 6         |
| 25  | 7403      | O'Ring, Side Bell                       | 2         |
| 26  | 7205      | Seal, Side Bell                         | 2         |
| 27  | 7310      | Bearing Cup, Side Bell                  | 2         |
| 28* | 7309      | Bearing Cone, Differentials             | 2         |
| 29* | 5097      | Shim Kit, Differentials                 | 1         |
| 30  | 8332      | Retaining Ring, Lower Shaft             | 2         |
| 31* | 5003-308  | Lower Shaft                             | 1         |
| 31* | 5003-308V | Lower Shaft, VascoMax®                  | 1         |
| 32  | 7390      | Ball Bearing, Lower Shaft               | 1         |
| 33  | 7413      | O'Ring, Seal Plate                      | 1         |
| 34  | 7652      | Retaining Ring, Seal Plate (.750" Seal) | 1         |
| 35* | 7204T     | Seal, Seal Plate (Thick Seal .750")     | 1         |

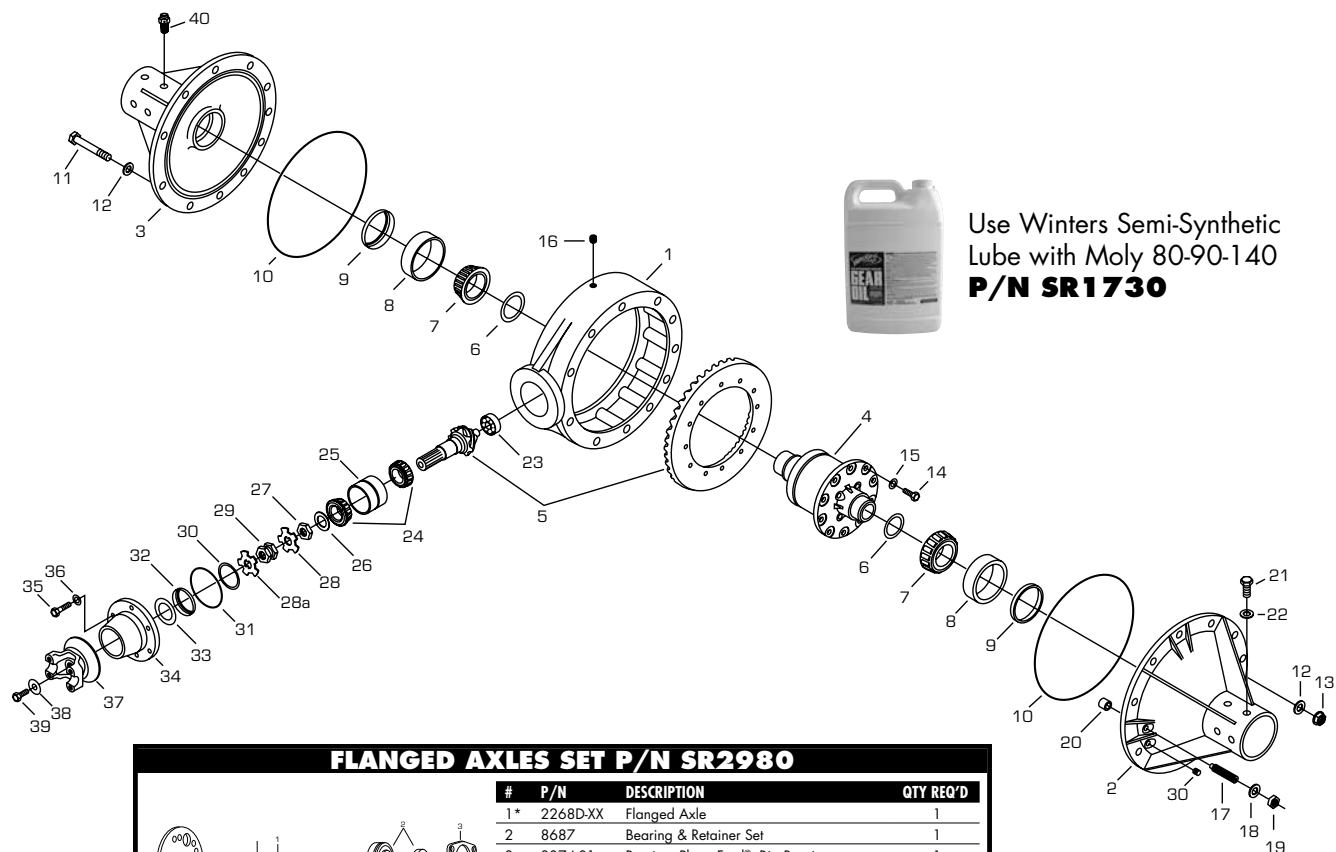
| #   | P/N      | DESCRIPTION                               | QTY REQ'D |
|-----|----------|---|-----------|
| 36  | 5018-01M | Seal Plate, .750" Seal                    | 1         |
| 37  | 7114     | 3/8" SAE Flatwasher                       | 6         |
| 38  | 7107     | 3/8-16 x 1 1/4" HHCS, Seal Plate          | 6         |
| 39  | 3436     | Drive Yoke, 1350, Steel                   | 1         |
| 40  | 5037     | Retaining Washer, Drive Yoke              | 1         |
| 41  | 7109Y    | 3/8-24 x 1" HHCS, Drive Yoke              | 1         |
| 42  | 8077     | Ring Gear Bolt, Threaded Ring Gear        | 12        |
| 44  | 7863     | Stud                                      | 22        |
| 45  | 7178     | 7/16" SAE Flatwasher                      | 22        |
| 46  | 7177N    | 7/16-20 Flanged Locknut                   | 22        |
| 47  | 7155     | 1/2-13 Adjusting Screw                    | 1         |
| 48  | 7167     | 1/2" SAE Flatwasher                       | 1         |
| 49  | 7137     | 1/2-13 Jam Nut, Adjusting Screw           | 1         |
| 50  | 5010     | Thrustblock, Adjusting Screw              | 1         |
| 51  | 7109     | 3/8-24 x 1" HHCS, Side Bell               | 16        |
| 52  | 7114     | 3/8" SAE Flatwasher                       | 16        |
| 53  | 7111     | 3/8" Hex Head Pipe Plug                   | 2         |
| 54  | 3193     | Retaining Ring Retainer                   | 1         |
| 55  | 3441     | Bearing Retainer                          | 1         |
| 56  | 3258     | Bearing Retainer, Gear Cover              | 1         |
| 57  | 8087     | 1/4-20 x 1/2" BHCS                        | 6         |
| 58  | SR9341   | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |
| 59  | 7113     | 1/2-20 x 2" HHCS                          | 4         |
| 60  | 7773     | Spring Washer                             | 8         |
| 61† | 6360     | Right Side Housing                        | 1         |
| 62  | 6315     | Wear Plates                               | 2         |
| 63  | 6330-02  | Side Gear, Right Hand                     | 1         |
| 64  | 6329-01  | Pinion Gear, Right Hand                   | 4         |
| 65† | 6361     | Center Housing                            | 1         |
| 66  | 6330-01  | Side Gear, Left Hand                      | 1         |
| 67  | 6329-02  | Pinion Gear, Left Hand                    | 4         |
| 68  | 1459     | Bushing                                   | 4         |
| 69† | 6359     | Left Side Housing                         | 1         |
| 70  | 7113     | 1/2-20 x 2" HHCS                          | 4         |
| 71  | 5034-11A | 31 Spline Aluminum Spool                  | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. † Must be purchased as a complete unit.

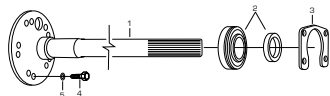
# BANJO STYLE-FULL SIZE REAR

## SR4220 Big Bearing Flanged Axle SR4225 Big Bearing Flanged Axle (Torino®)

See page 79 for Set-Up Instructions



### FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

# BANJO STYLE-FULL SIZE REAR

63

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N     | DESCRIPTION                                 | QTY REQ'D | #   | P/N      | DESCRIPTION                               | QTY REQ'D |
|-----|---------|---|-----------|-----|----------|---|-----------|
| 1   | 6559    | Aluminum Non-Quick Change Center Section    | 1         | 20  | 5010     | Thrust Block                              | 1         |
| 2*  | 6697-02 | Aluminum 4 Rib Left Side Bell               | 1         | 21* | 7109S    | 3/8-24 x 3/4" HHCS, 4 & 6 Rib Side Bell   | 16        |
| 2*  | 1663-02 | Aluminum HD 6 Rib Left Side Bell            | 1         | 21* | 7109     | 3/8-24 x 1" HHCS, 8 Rib Side Bell         | 16        |
| 2*  | 5016-02 | Aluminum HD 8 Rib Left Side Bell            | 1         | 22  | 7114     | 3/8" SAE Flatwasher                       | 16        |
| 3*  | 6697-01 | Aluminum 4 Rib Right Side Bell              | 1         | 23* | 7312     | Ball Bearing, Pinion Nose                 | 1         |
| 3*  | 1663-01 | Aluminum HD 6 Rib Right Side Bell           | 1         | 23* | 7331     | Roller Bearing, Pinion Nose               | 1         |
| 3*  | 5016-01 | Aluminum HD 8 Rib Right Side Bell           | 1         | 24  | 7308     | Bearing Cone, Pinion Shaft                | 2         |
| 4   | 6513-31 | Winters Track, 31 Spline                    | 1         | 25  | 7307     | Bearing Double Cup, Pinion Shaft          | 1         |
| 5   | 5714M   | Ring & Pinion, 4.12 Standard                | 1         | 26  | 5055     | Bearing Washer, Pinion Shaft              | 1         |
| 6   | 5295    | Shim Kit                                    | 1         | 27  | 5032R    | Jam Nut, Pinion Shaft                     | 2         |
| 7   | 7340    | Carrier Bearing Cone                        | 2         | 28  | 5056     | Bearing Lockwasher, Pinion Shaft          | 1         |
| 8   | 7310    | Bearing Cup, Side Bell                      | 2         | 28a | 1136     | Bearing Lockwasher, Double Tab            | 1         |
| 9   | 7205    | Carrier Seal                                | 2         | 29  | 1137     | Top Nut                                   | 1         |
| 10* | 7403T   | O'Ring, 4 & 6 Rib Side Bell                 | 2         | 30  | 7653     | Internal Snap Ring, Seal Plate            | 1         |
| 10* | 7403    | O'Ring, 8 Rib Side Bell                     | 2         | 31  | 7448     | O'Ring, Seal Plate                        | 1         |
| 11  | 7176    | 7/16-20 x 5 1/2" HHCS Thrubolt              | 11        | 32* | 7204     | Seal, Seal Plate                          | 1         |
| 12  | 7178    | 7/16" SAE Flatwasher                        | 22        | 33  | 6115-065 | Shim, .065" Thick                         | 1         |
| 13  | 7177    | 7/16-20 Flanged Locknut                     | 11        | 34  | 6554     | Seal Plate                                | 1         |
| 14  | 7852    | Ring Gear Bolt, Threaded Ring Gear          | 12        | 35  | 7107     | 3/8-16 x 1 1/4" HHCS                      | 6         |
| 15  | 7815    | 3/8" Belleville Washer                      | 12        | 36  | 7114     | 3/8" SAE Flatwasher                       | 6         |
| 16  | 7111B   | 3/8" Socket Head Pipe Plug                  | 3         | 37* | 5038     | Drive Yoke, 1310, 10 Spline               | 1         |
| 17* | 6149    | 1/2-13 Adjusting Screw, 4 & 6 Rib Side Bell | 1         | 37* | 3588M    | Drive Yoke, 1350                          | 1         |
| 17* | 7155    | 1/2-13 Adjusting Screw, 8 Rib Side Bell     | 1         | 38  | 5037     | Retaining Washer, Drive Yoke              | 1         |
| 18  | 7167A   | 1/2" SAE Flatwasher                         | 1         | 39  | 7109Y    | 3/8-24 x 1" HHCS                          | 1         |
| 19  | 7137    | 1/2-13 Jam Nut                              | 1         | 40  | SR9341   | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

# BANJO STYLE-MINI REAR

**SR4220M** Big Bearing Flanged Axle

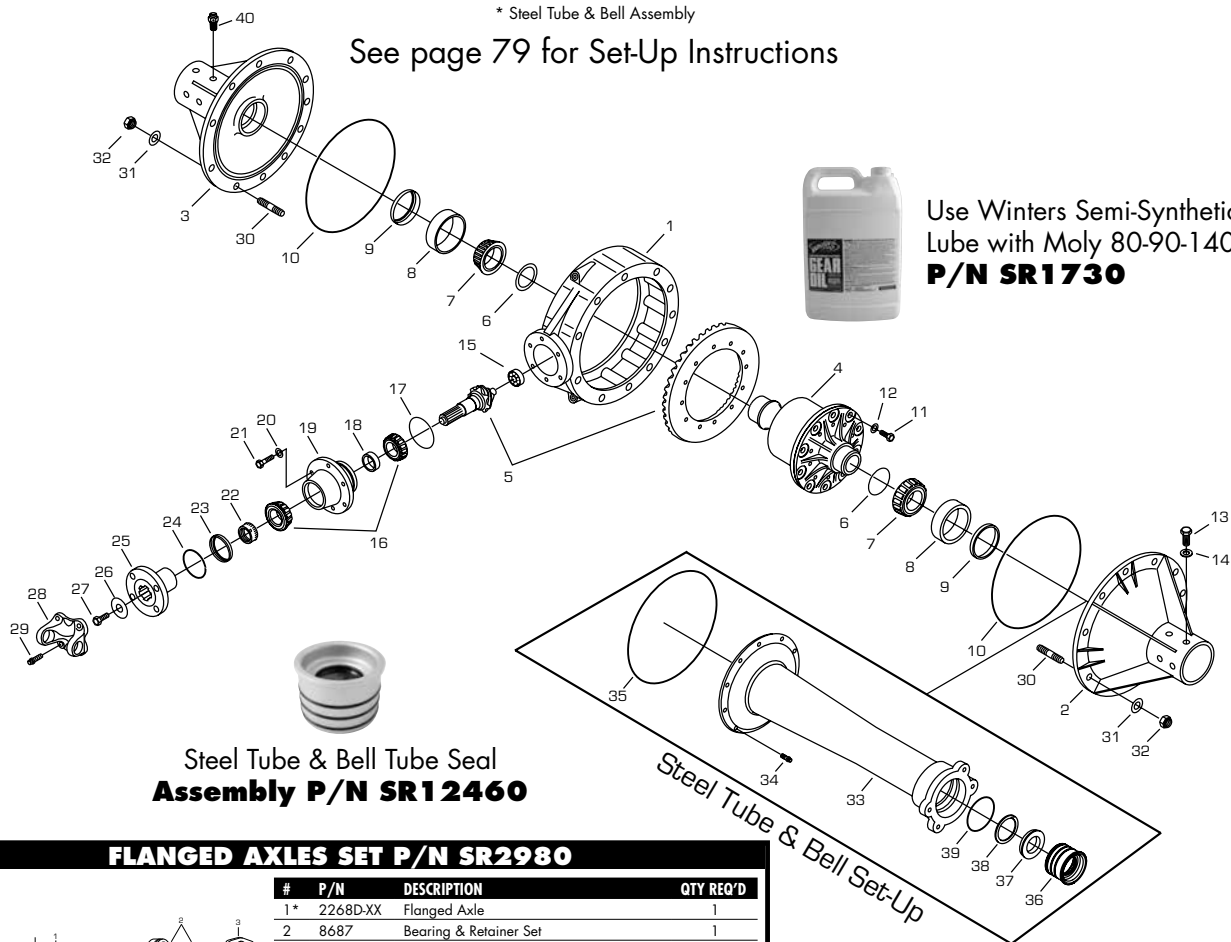
**SR4225M** Big Bearing Flanged Axle (Torino®)

**\*SR4220MSTB** Big Bearing Flanged Axle

**\*SR4225MSTB** Big Bearing Flanged Axle (Torino®)

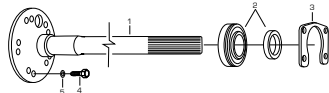
\* Steel Tube & Bell Assembly

See page 79 for Set-Up Instructions



Steel Tube & Bell Tube Seal  
Assembly P/N SR12460

## FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

# BANJO STYLE-MINI REAR

65

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

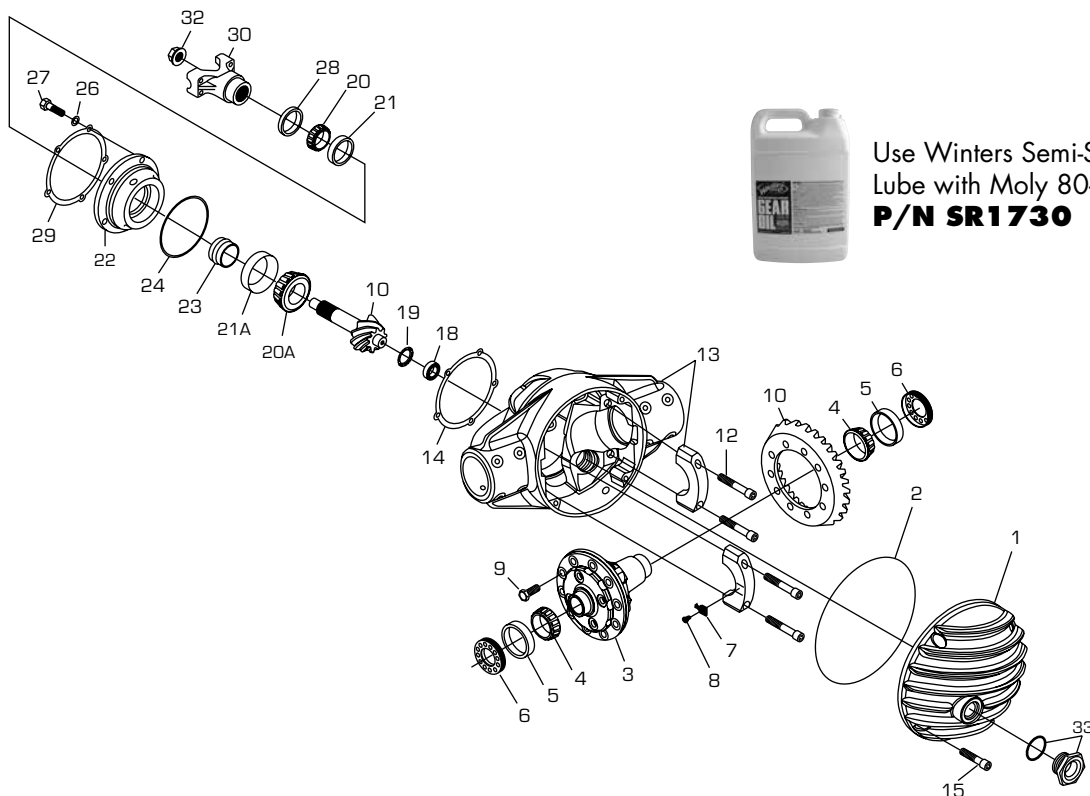
| #  | P/N     | DESCRIPTION                              | QTY REQ'D |
|----|---------|--|-----------|
| 1* | 2518    | Aluminum Non-Quick Change Center Section | 1         |
| 2* | 1449-02 | Aluminum 4 Rib Left Side Bell            | 1         |
| 3* | 6840-01 | Aluminum 4 Rib Right Side Bell           | 1         |
| 4* | 1792    | Wedgelock                                | 1         |
| 5* | 6811    | Ring & Pinion, 3.78 Standard             | 1         |
| 6* | 5295    | Shim Kit                                 | 1         |
| 7  | 7340    | Carrier Bearing Cone                     | 2         |
| 8  | 7310    | Bearing Cup, Side Bell                   | 2         |
| 9  | 7205    | Carrier Seal                             | 2         |
| 10 | 7451    | O'Ring, 4 Rib Side Bell                  | 2         |
| 11 | 7852    | Ring Gear Bolt, Threaded Ring Gear       | 12        |
| 12 | 7815    | 3/8" Belleville Washer                   | 12        |
| 13 | 7109S   | 3/8-24 x 3/4" HHCS, 4 Rib Side Bell      | 16        |
| 14 | 7114    | 3/8" SAE Flatwasher                      | 16        |
| 15 | 7392    | Ball Bearing, Pinion Nose                | 1         |
| 16 | 7527    | Bearing Cone, Pinion Shaft               | 1         |
| 17 | 8404    | O'Ring                                   | 1         |
| 18 | 2951    | Spacer                                   | 1         |
| 19 | 2519    | Bearing Cup                              | 1         |
| 20 | 7114    | 3/8" SAE Flatwasher                      | 6         |

| #   | P/N    | DESCRIPTION                               | QTY REQ'D |
|-----|--------|---|-----------|
| 21  | 7110   | Bolt                                      | 6         |
| 22  | 2892   | Pinion Nut                                | 1         |
| 23  | 7204   | Seal                                      | 1         |
| 24  | 7652   | Retaining Ring                            | 1         |
| 25  | 2521   | Output Flange                             | 1         |
| 26  | 5037   | Retaining Washer, Drive Yoke              | 1         |
| 27  | 7109Y  | 3/8-24 x 1" HHCS                          | 1         |
| 28  | 5856   | Yoke, 1310                                | 1         |
| 29  | 7735   | Bolt                                      | 4         |
| 30* | 7905   | Stud                                      | 20        |
| 31* | 7916   | 3/8" Belleville Washer                    | 20        |
| 32* | 7885   | 3/8-16 Nylon Locknut                      | 20        |
| 33† | SR4900 | Steel Tube & Bell Assembly                | 2         |
| 34† | 7735   | Side Bell Bolts                           | 20        |
| 35† | 7451   | 8 3/8" Side Bell O'Ring                   | 2         |
| 36† | SR4933 | Seal Adapter                              | 2         |
| 37† | SR8376 | Seal                                      | 2         |
| 38† | SR8378 | Retaining Ring                            | 2         |
| 39† | SR7468 | O'Ring                                    | 6         |
| 40  | SR9341 | 3/8-24 Stainless Steel Breather, 1/2" Hex | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear. † Steel Tube & Bell Assembly.

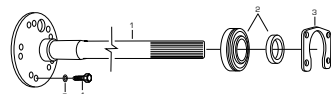
# CHAMPIONSHIP 9"

## SR92520CR Big Bearing Flanged Axle SR92525CR Big Bearing Flanged Axle (Torino®)



Use Winters Semi-Synthetic  
Lube with Moly 80-90-140  
**P/N SR1730**

### FLANGED AXLES SET P/N SR2980



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.



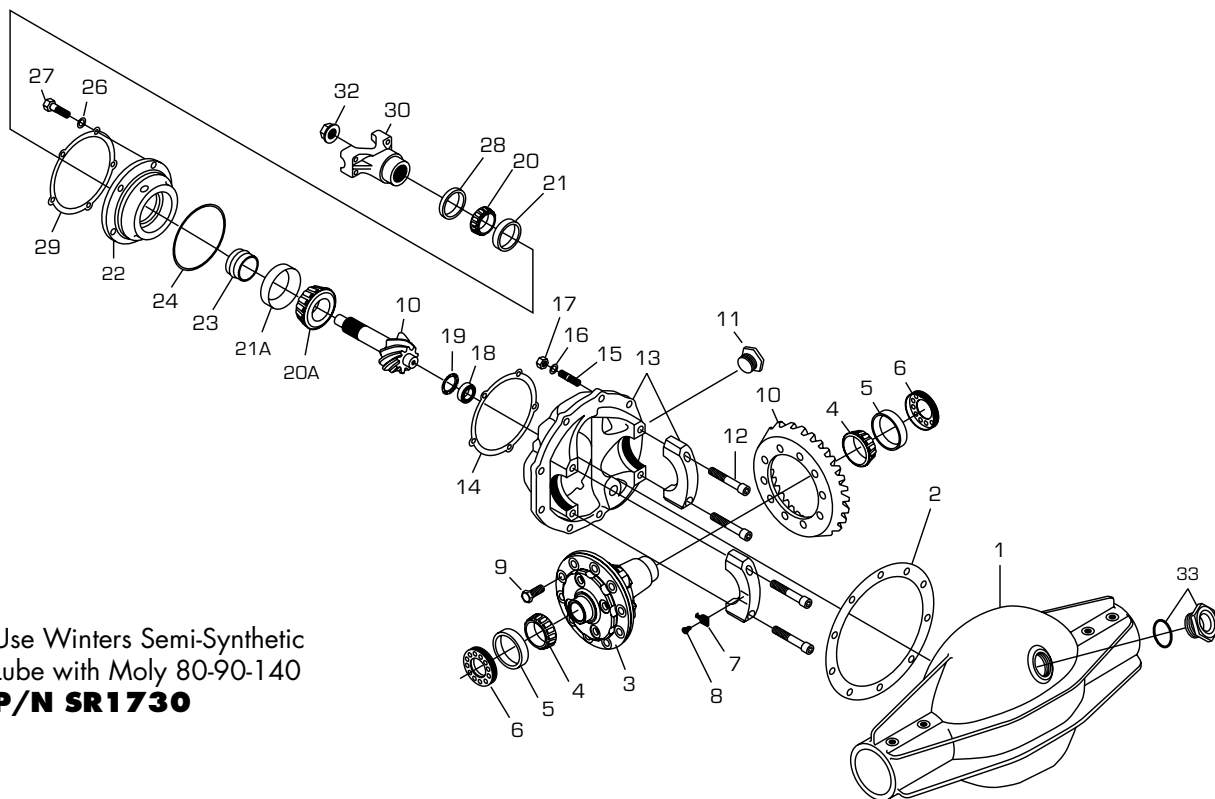
**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N       | DESCRIPTION                                  | QTY REQ'D |
|-----|-----------|--|-----------|
| 1   | 94305     | Aluminum Rear Cover                          | 1         |
| 2   | 98417     | O'Ring                                       | 1         |
| 3   | 94620-31A | Gear Trac                                    | 1         |
| 4   | 97541     | Bearing Cone                                 | 2         |
| 5   | 97542     | Bearing Cup                                  | 2         |
| 6   | 93613     | Adjusting Nut, Carrier Bearings, 3.250" O.D. | 2         |
| 7*  | 93614     | Locking Tab, Adjusting Nut                   | 2         |
| 7*  | 93615     | Locking Tab, Adjusting Nut                   | 2         |
| 7*  | 93616     | Locking Tab, Adjusting Nut                   | 2         |
| 8   | 97933     | 5/16-18 x 3/8" BHCS, Locking Tab             | 2         |
| 9   | 97934     | 7/16-20 Ring Gear Bolt (Special)             | 10        |
| 10* | 945XXX    | Ring & Pinion                                | 1         |
| 12  | 97932     | 1/2-13 x 3 1/4" SHCS, Bearing Cap            | 4         |
| 13  | 94305     | Aluminum Housing                             | 1         |
| 14  | 91275     | Shim Kit, Pinion Retainer                    | 1         |
| 15  | 97778     | 3/8-16 x 1" SHCS                             | 4         |
| 18  | 97576     | Roller Bearing, Pinion Pilot                 | 1         |

| #   | P/N   | DESCRIPTION                              | QTY REQ'D |
|-----|-------|--|-----------|
| 19  | 92588 | Retainer, Pilot Bearing                  | 1         |
| 20  | 97527 | Bearing Cone, Pinion Retainer            | 2         |
| 20A | 97553 | Large Bearing Cone, Pinion Retainer      | 2         |
| 21  | 98622 | Bearing Cup, Pinion Retainer             | 2         |
| 21A | 98623 | Large Bearing Cup, Pinion Retainer       | 2         |
| 22  | 96897 | Pinion Retainer, Aluminum, Daytona Style | 1         |
| 23* | 92392 | Crush Sleeve                             | 1         |
| 23* | 92969 | Solid Sleeve (Machine To Length)         | 1         |
| 24  | 98407 | O'Ring                                   | 1         |
| 26  | 97114 | 3/8" SAE Flatwasher                      | 5         |
| 27  | 97107 | 3/8-16 x 1 1/4" HHCS                     | 5         |
| 28  | 97247 | Seal, Pinion Retainer                    | 1         |
| 29  | 93617 | Lock Ring                                | 1         |
| 30  | 92417 | Yoke, 1310 Series, Short-Narrow          | 1         |
| 32  | 92222 | Pinion Lock Nut                          | 1         |
| 33  | 96857 | Large Inspection Plug w/O'Ring           | 1         |

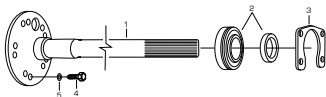
\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

**SR92520** Big Bearing Flanged Axle  
**SR92525** Big Bearing Flanged Axle (Torino®)



Use Winters Semi-Synthetic  
 Lube with Moly 80-90-140  
**P/N SR1730**

**FLANGED AXLES SET P/N SR2980**



| #  | P/N      | DESCRIPTION                                  | QTY REQ'D |
|----|----------|--|-----------|
| 1* | 2268D-XX | Flanged Axle                                 | 1         |
| 2  | 8687     | Bearing & Retainer Set                       | 1         |
| 3  | 3374-01  | Retainer Plate, Ford®, Big Bearing           | 1         |
| 3  | 3374-02  | Retainer Plate, Ford®, Big Bearing (Torino®) | 1         |
| 4  | 3834-01  | 1/2-20 x 2" Stud, Press-In                   | 5         |
| 4  | 4266     | 1/2-20 x 2" Stud, Screw-In                   | 5         |
| 5  | 8812     | Internal Star Lockwasher, Stud               | 5         |

\* Specify Length when ordering.

**Must be specific when ordering replacement parts. P/N's shown are unpolished.  
Polishing available at extra charge.**

| #   | P/N       | DESCRIPTION                                  | QTY REQ'D |
|-----|-----------|--|-----------|
| 1   | 95243     | Aluminum Rear Housing                        | 1         |
| 2   | 91273     | Gasket, Rear Housing                         | 1         |
| 3   | 94620-31A | Gear Trac                                    | 1         |
| 4   | 97541     | Bearing Cone                                 | 2         |
| 5   | 97542     | Bearing Cup                                  | 2         |
| 6   | 92680     | Adjusting Nut, Carrier Bearings, 3.250" O.D. | 2         |
| 7   | 96793     | Locking Tab, Adjusting Nut, Aluminum         | 2         |
| 8   | 97933     | 5/16-18 x 3/8" BHCS, Locking Tab (For 6793)  | 2         |
| 9   | 97934     | 7/16-20 Ring Gear Bolt                       | 10        |
| 10* | 945XXX    | Ring & Pinion                                | 1         |
| 11  | 98082     | Level Plug                                   | 1         |
| 12  | 97932     | 1/2" Diameter Bearing Cap Bolt               | 4         |
| 13  | 96791-03  | Aluminum Carrier Housing                     | 1         |
| 14  | 91275     | Shim Kit, Pinion Retainer                    | 1         |
| 15  | 97191     | 3/8" Studs, Threaded, Aluminum Housing       | 10        |
| 16  | 97114     | 3/8" SAE Flatwasher                          | 10        |
| 17  | 97882     | 3/8-24 Nylon Locknut                         | 10        |
| 18  | 97576     | Roller Bearing, Pinion Pilot                 | 1         |

| #   | P/N   | DESCRIPTION                              | QTY REQ'D |
|-----|-------|--|-----------|
| 19  | 92588 | Retainer, Pilot Bearing                  | 1         |
| 20  | 97527 | Bearing Cone, Pinion Retainer            | 2         |
| 20A | 97553 | Large Bearing Cone, Pinion Retainer      | 2         |
| 21  | 98622 | Bearing Cup, Pinion Retainer             | 2         |
| 21A | 98623 | Large Bearing Cup, Pinion Retainer       | 2         |
| 22  | 96897 | Pinion Retainer, Aluminum, Daytona Style | 1         |
| 23* | 92392 | Crush Sleeve                             | 1         |
| 23* | 92969 | Solid Sleeve (Machine To Length)         | 1         |
| 24  | 98407 | O'Ring                                   | 1         |
| 25  | 97191 | 3/8" Stud, 3rd Member                    | 5         |
| 26  | 97114 | 3/8" SAE Flatwasher                      | 5         |
| 27  | 97822 | 3/8-24 Nylon Locknut                     | 5         |
| 28  | 97247 | Seal, Pinion Retainer                    | 1         |
| 29  | 93617 | Lock Ring                                | 1         |
| 30  | 92417 | Yoke, 1310 Series, Short-Narrow          | 1         |
| 32  | 92222 | Pinion Lock Nut                          | 1         |
| 33  | 96858 | Large Inspection Plug w/O'Ring           | 1         |

\* Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

# CHAMPIONSHIP QUICK CHANGE SET-UP

## **DO NOT TORCH**

350°F plus and heat treat is permanently lost. Localized hot spots cause permanent distortion and loss of critical alignments. Castings will "crack" if subjected to torching.

## **PREPARATORY TO INSTALLING PINION INTO CASE (CENTER SECTION)**

1. Retain pinion nose bearing on to the pinion gear with fast dry thread lock to insure the bearing does not fall off during installation into the center section.
2. Check and remove any nicks or burrs in the center section pinion bore. Make sure center is clean and free of chemicals or flammable materials.
3. Heat the "clean" center to 270°-300°F in an oven. ***DO NOT OVER HEAT as loss of heat treatment or distortion will occur.***

## **INSTALLING PINION INTO CASE**

Remove heated center section from the oven and lubricate the pinion bearing bores and bearings. Install "chilled" pinion, then use a urethane (soft) hammer to ensure the pinion is seated.

Install the lower shaft and bearings while the center is still hot. ***USE CAUTION-Don't burn yourself.***

1. Lubricate all bearing bores.
2. Start front ball bearing into case bore approximately 1/8".
3. Install lower shaft through center section from rear to front into ball bearing.
4. Slide rear ball bearing over installed shaft and carefully tap rear bearing evenly into place. Pinion Spacer P/N 5020 and Pinion Retainer P/N 6269A should now be installed using six (6) 3/8-16 x 1" HHCS P/N 7110 torqued to 20-25 ft lbs.

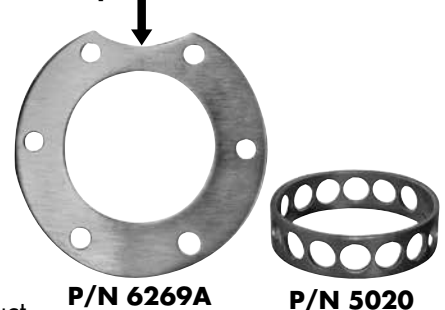
NOTE: All bolts threaded into aluminum should be treated with an anti-seize product.

5. Front ball bearing can now be evenly tapped into place. NOTE: the above assembly procedure is to insure that bearings do not "cock" in center section.

6. Front seal plate may now be installed and retaining bolts torqued to 20-25 ft lbs.

***ALLOW ASSEMBLED UNIT TO COOL TO ROOM TEMPERATURE (68°-72°F) BEFORE ATTEMPTING TO ADJUST PINION BEARING PRELOAD.***

Install Up @ 12 O'Clock



P/N 6269A

P/N 5020

## **TAPERED ROLLER BEARING PINION PRELOAD**

When adjusting pinion bearing posi-lock with new bearings, torque the posi-nut to obtain 15-20 in lbs pinion bearing rotational preload, 8-10 in lbs for used bearings. Lubricate o'ring in posi-lock retaining cap. Install retaining cap using finger pressure only. If it resists engagement, remove cap from pinion and rotate to next spline on 10 spline shaft and re-install. 10 splines = 10 combinations... Try each spline for the best "no resistance" fit.

***Above preloads are set at 68°-72°F.***



**Posi-Lock Assembly  
P/N 6498R**

## **CARRIER ASSEMBLY AND RING GEAR**

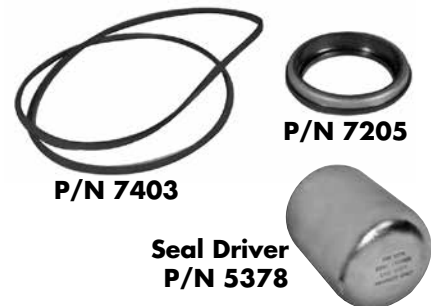
1. Adjusting Carrier preload is next. Remove seals and o'rings from bells. Do not install ring gear onto carrier or spool as of yet.
2. Stand left side bell and tube vertically with bell up. Install Checking Bearing P/N 5294 on ring gear end of carrier.
3. Set carrier and bearing into left vertical bell.
4. Set center section assembly on bell, making sure center section is setting flat against bell flange without bell seals and o'rings.
5. Install second checking bearing on carrier.
6. Right bell should now be put into position on top of center section. If bell flange has full contact with center section, shims should be added until right bell flange is held above center section approximately .012" for Winters Track.
7. Now that proper shim pack thickness has been determined, the shim pack should be removed and set aside for step number 9.
8. Ring gear should now be installed on carrier making sure contact surfaces are perfectly clean. Install all 12 bolts and torque nuts alternating in a crisscross pattern in steps to 35 ft lbs on non-threaded ring gears. Use 60 ft lbs for threaded W/P type ring gear bolts using belleville washers. Red Loctite® adhesive should be used on these bolts.
9. Place one shim at a time under checking bearing on ring gear side of carrier. Placing carrier and ring gear assembly in left bell, set center section on left bell and check for ring gear/pinion backlash. Make sure adjustable ring gear pad in left bell is backed out far enough so that it does not make contact with the ring gear. (If you remove the wear pad completely, **DO NOT** forget to replace it before tightening the thru-bolts or complete rear will have to be disassembled to re-install the pad.) Carefully add shims until backlash has been removed.

The remaining shims from the original shim pack should be installed on the opposite side of carrier. Put the right bell in place and bolt together. Check backlash. It should be between .004"-.006". If backlash is too much, shims from the right side must be moved to the left side. Once proper backlash has been reached, the checking bearings can be removed and regular bearings installed, with shims in place.

# CHAMPIONSHIP QUICK CHANGE SET-UP

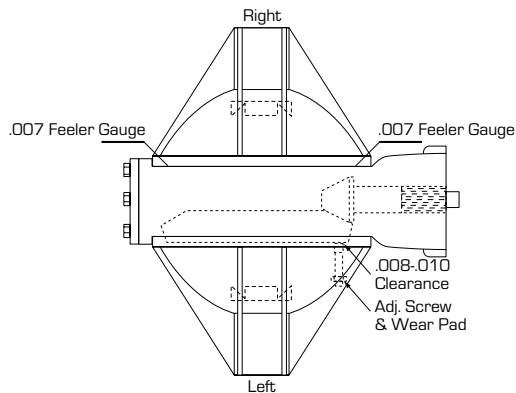
## CARRIER ASSEMBLY AND RING GEAR CONTINUED

10. Install new side bell seals (P/N 7205) and o'rings (4 & 6 Rib Bells P/N 7403T, 8 Rib Bells P/N 7403). Lubricate seals generously. Reassemble, install thrubolts, washers and nuts. Be sure to torque thrubolts in steps until a final torque of 35 ft lbs is reached using an alternating crisscross sequence. Spin the pinion over several times checking the backlash at several intervals. Backlash should be between .004"-.006". If backlash is not correct, the rear must be torn apart and the shims swapped from side to side until proper backlash is obtained. Tight spots are not acceptable.

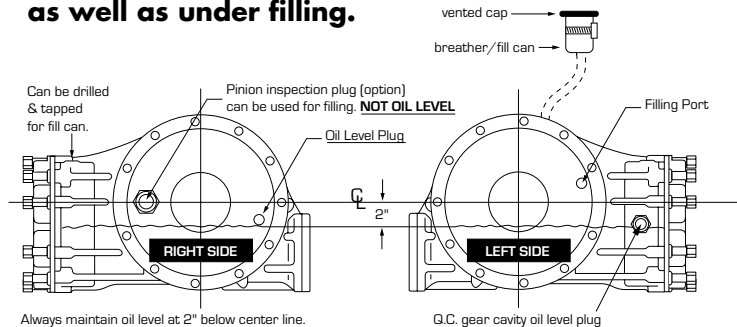


11. Adjust ring gear wear pad by running wear pad in against the ring gear with force of 5 in lbs, then back off approximately 1/4 turn to obtain .008"-.010" clearance between ring gear and wear pad. Tighten jam nut on adjusting screw being careful not to turn adjusting screw any further.

**NOTE: Assembly Temperature: 68°-72°**



**IMPORTANT: Overfilling can cause problems as well as under filling.**



Always maintain oil level at 2" below center line. Make sure rear is level when checking oil.

## COMMONLY USED REPLACEMENT PARTS

| P/N    | DESCRIPTION  | SIZE  |
|--------|--|-------|
| 7309   | Carrier Bearing, Steel Carrier                     | 2.000 |
| 7340   | Carrier Bearing, Aluminum Carrier                  | 2.031 |
| 5138   | Checking Bearing, Steel Carrier                    | 2.000 |
| 5294   | Checking Bearing, Aluminum Carrier                 | 2.031 |
| 5097   | Carrier Shim Kit, Steel Journal Size               | 2.000 |
| 5295   | Carrier Shim Kit, Aluminum Journal Size            | 2.031 |
| 7205   | Side Bell Seals                                    | ----- |
| 7204T  | Front Yoke Seal, .750"                             | ----- |
| 7204V  | Front Yoke Seal, .750", Viton                      | ----- |
| 6729   | Gear Cover Gasket, 10 Bolt                         | ----- |
| 6729HD | Heavy Duty Gear Cover Gasket, 10 Bolt              | ----- |
| 7403T  | Bell O'Ring, 4 & 6 Rib Bell                        | ----- |
| 7403   | Bell O'Ring, 8 Rib Bell                            | ----- |
| 7868   | Winters Threaded Ring Gear Bolts/Washers (12 Each) | ----- |
| SR1730 | Winters 80-90-140 Semi Synthetic w/Moly (Gal)      | ----- |

## TORQUE SPECS

Threaded Ring Gear Bolts - 60 ft lbs using Red Loctite®

Non- Threaded Ring Gear Bolts & Locknut - 35 ft lbs

Thrubolts - 35 ft lbs

Pinion Retaining Plate Bolts - 25 ft lbs

Seal Plate Bolts - 20 ft lbs

Left Bell Adjuster Screw-Snug up, back off 1/4 turn, use red thread lock on jam nut.



## **DO NOT TORCH**

350°F plus and heat treat is permanently lost. Localized hot spots cause permanent distortion and loss of critical alignments. Castings will “crack” if subjected to torching.

## **PINION INSTALLATION**

1. Make sure center is clean and free of chemicals or flammable materials.
2. Heat the “clean” center to 270°-300°F in an oven. ***DO NOT OVER HEAT as loss of heat treatment or distortion will occur.***
3. Remove heated center from oven, lubricate pinion bearing bore and bearings. Install “chilled” pinion using a urethane (soft) hammer to ensure the pinion is seated.

## **TAPERED ROLLER BEARING PINION PRELOAD**

After pinion is installed and case has cooled down to room temperature (68°-72°F), torque the pinion nut to approximately 50-60 ft lbs. Preload NEW pinion bearings to a maximum of 25 in lbs. Preload USED pinion bearings to 8-10 in lbs.

## **SHIM STARTING POINT**

.125” on right, .100” on left

## **SIDE BELL PRELOAD**

.008”-.010” WITHOUT seals or o’rings

## **RING AND PINION BACKLASH**

.004”-.006”, NO tight spots when rotated

## **TORQUE SPECIFICATIONS**

Pinion Retainer Plate Bolts- 25 ft lbs

Seal Plate Bolts- 20 ft lbs (when applicable)

\*Threaded WP Ring Gear Bolts with Belleville Washers- Final Torque, Steel using thread lock- 60 ft lbs

\*Thru Bolts- 35 ft lbs

\*Torque alternating in a crisscross pattern in steps to specified final torque.

After ring gear is installed and backlash is of absolute minimum and the bolts/nuts torqued, the total preload of the assembly should be: Preload **NEW** pinion bearings and seals, 37-39 in lbs, Preload **USED** pinion bearings and seals, 15-20 in lbs.

To adjust the left bell adjustment screw, turn screw in until it bottoms out (with approximately 5 in lbs of force), then back it off a 1/4 turn. Use thread lock and tighten aluminum nut.

# V8 QUICK CHANGE SET-UP

## **DO NOT TORCH**

350°F plus and heat treat is permanently lost. Localized hot spots cause permanent distortion and loss of critical alignments. Castings will “crack” if subjected to torching.

## **PINION INSTALLATION**

1. Make sure center is clean and free of chemicals or flammable materials.
2. Heat the “clean” center to 270°-300°F in an oven. ***DO NOT OVER HEAT as loss of heat treatment or distortion will occur.*** Place the pinion in the freezer before attempting installation. Using a cold pinion with a warm center makes installation effortless.
3. Remove heated center from oven, lubricate pinion bearing bore and bearings. Install “chilled” pinion using a urethane (soft) hammer to ensure the pinion is seated.

## **PINION PRELOAD**

After pinion is installed and case has cooled down to room temperature (68°-72°F), torque the pinion retainer bolts to 25 ft lbs. Preload **NEW** pinion bearings to a maximum of 20 in lbs. Preload **USED** pinion bearings to 8-10 in lbs.

## **SHIM STARTING POINT**

.085”

## **SIDE BELL PRELOAD**

**WITHOUT** seals or o’rings. .007” Wedgelock

## **RING AND PINION BACKLASH**

.004”-.006”, **NO** tight spots when rotated

## **TORQUE SPECIFICATIONS**

Pinion Retainer Plate Bolts- 25 ft lbs

Gear Cover Bearing Retaining Caps- 60 in lbs (5 ft lbs)

\*Threaded WP Ring Gear Bolts with Belleville Washers- Final Torque, Steel using Red Loctite®- 60 ft lbs

\*Side Bell Nuts- 30 ft lbs

\*Torque alternating in a crisscross pattern in steps to specified final torque.

After ring gear is installed and backlash is of absolute minimum and the bolts/nuts torqued, the total preload of the assembly should be: Preload **NEW** pinion bearings and seals, 27-29 in lbs, Preload **USED** pinion bearings and seals, 15-20 in lbs.

As purchased, this housing unit will fit 1935 to 1948 Ford® rear axle housings. Rear axle assemblies prior to 1937 will require the use of different carrier bearings matching the year of bells being used.

## **INSPECTION AND PREPARING DONOR BELLS**

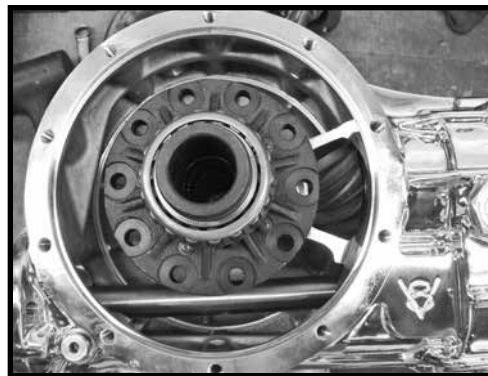
1. Clean both axle housings and inspect carrier races. New race replacement is suggested at this time.
2. This kit uses modern day flanged 9" Ford style axles, so updating the housing ends is needed before assembly can be accomplished.

## **ASSEMBLY**

Upon successful inspection of donor parts, please follow these next steps for assembly. It is suggested that you make an assembly stand to help hold the unit in a vertical position for assembly. With receiving this kit, the center section is complete. The pinion preload is set to factory specs. If your unit is not together, please refer to page 72 for the pinion installation procedure.

## **CARRIER PRELOAD**

1. Stand right bell vertically in assembly stand with bell end up.
2. Place one gasket on the bell, lining up the holes. While making sure the mating surfaces are clean and smooth, stack the center section on top of the bell, aligning the bolt holes or studs, then torque the two together to 30 ft lbs, using a crisscross pattern.
3. Install Torrington® spacer and .060" of shims on right hand side of the differential, and .060" of shims on the left hand side using a press. Press on the inner race of the bearing to avoid damage to the bearing. Press until bearings are firmly seated.
4. Place the Wedglock Differential in the center section with the ring gear mounting flange toward the top (Ring gear not installed. See photo at right.).
5. Put the other side gasket in place, and stack the left side bell on the center section. NOTE: It will rock side to side. The bell will not seat against the center section.
6. Measure the amount of gap between bell and center with feeler gauges. Make measurement the same on both sides of the left bell (top and bottom) of rear.
7. After taking that measurement, subtract .007". That is the thickness of shims that need to be removed from the differential to obtain the proper side bell crush (carrier preload). Example: .015-.007= the shim thickness to be removed is .008". (See figure #1 on page 78)



# V8 CENTER KIT SET-UP

## CARRIER PRELOAD CONTINUED

8. Disassemble the rear. Mount the ring gear to the differential by following the instructions supplied in the ring gear bolt pack.

9. With the right bell and center still standing vertically, place the differential back in the center. When rotating the differential from side to side (see photo below), you should feel play between the ring and pinion (the two gears). If there is no play, remove .005 shims off of the left side of the differential and add .005" to the right side of the differential. Repeat as necessary.

10. After establishing play between the two gears, place the left gasket on the center section and follow with the left bell aligning the bolts or studs, nut combination. Torque to 30 ft lbs using a crisscross pattern.

11. Check carrier preload. Rotating the pinion shaft a few times will seat the bearings. If available, a torque meter reading should be taken at this time. You are looking for a reading of 22-27 in lbs of rotational drag. If the reading is high, remove an equal amount of shims from both sides. If too low, add an equal amount of shims to both sides.

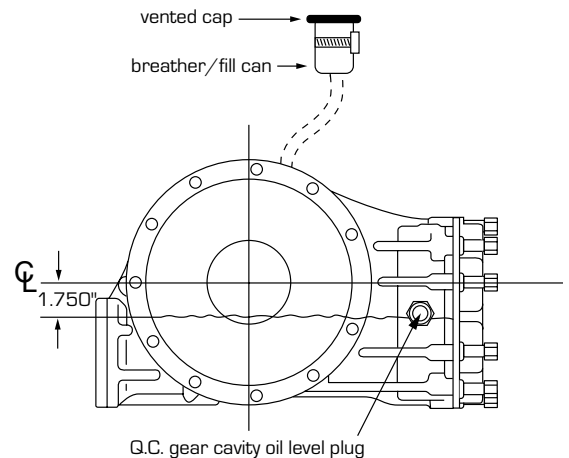
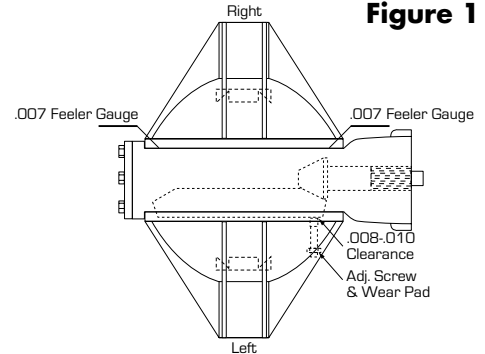
12. Check the backlash between the ring and pinion (the two gears). Placing a dial indicator on the pinion spline that the quick change gear rides on, you are looking for .004-.006 between them. If backlash is too high, remove a .005" shim from the right and add it to the left. If backlash is too low, add shims to the right and remove the left equally.

13. These last few steps may need to be repeated to obtain the proper rear end set-up specs.

14. When the rear end set-up specs are met within tolerance, disassemble the rear and lightly coat the gaskets with a layer of silicon and reassemble the rear. When the silicon dries, peel the excess silicon off the outer edges of the bells.

15. A vent should be installed on this rear.

**Figure 1**



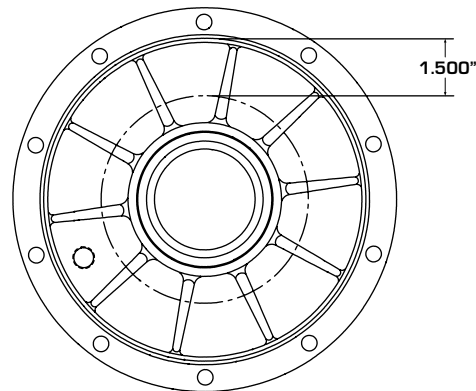
# EARLY FORD® V8 CENTER KIT SET-UP

77

As purchased, this housing unit will fit 1935 to 1948 Ford® rear axle housings. Rear axle assemblies prior to 1937 will require the use of different carrier bearings matching the year of housing being used. The quick change unit features a 4.11 ring and pinion.

## **INSPECTION AND PREPARING DONOR BELLS**

1. Remove from original Ford the differential carrier, spider gears and axles. Clean and prepare for reuse. Inspect axle housings and carrier races. New race replacement is suggested at this time.
2. Additional carrier bolt clearance is necessary on the inside of the left axle tube. Using a hand grinder, remove approximately 1 1/2" from the outer edges of the reinforcement webs (see diagram at right). Place ring gear carrier on housing and check for proper clearance.



## **ASSEMBLY**

Upon successful inspection of donor parts, please follow these next steps for assembly.

1. The pinion unit has been pre-assembled in the quick change case and has the correct bearing crush. **DO NOT REMOVE!**
2. Remove quick change cover and gear set and set aside.
3. Install left side differential carrier case (\*4205) to ring gear carrier.
4. Install left axle shaft into carrier ring gear assembly (\*4235L) and coat axle bearing with light oil.
5. Install spider (\*4211) and spider gear (\*4215) to left differential carrier case
6. Coat right axle bearing with light oil and install right axle (\*4235R) into right side carrier.
7. Install right side carrier case (\*4206) and axle to left side carrier case and spider, making sure the spiders mesh in the axle gears and coating with light oil.
8. Make sure differential carrier is seated on ring gear carrier.
9. Install differential carrier bolts (\*4217), place hardened washers on ring gear, install castle nuts and tighten, making sure all wire holes align in a circular fashion.
10. Safety wire bolts.

**\*Original Ford® Part Number. Used for reference purpose only.**

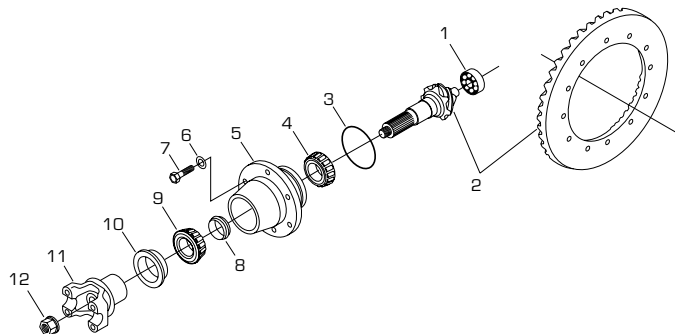
# EARLY FORD® V8 CENTER KIT SET-UP

## **CARRIER PRELOAD**

1. With the right axle housing in the upright position, install .010" paper gasket on housing (4010) bell.
2. Position quick change on right axle housing with the index bolt hole. Install four bolts 90° apart.
3. Install the ring gear axle assembly to the quick change case and right housing assembly. Put a light coat of oil on the bearing. Take care not to damage the axle grease seal in the axle housing when inserting axle.
4. Check mesh on ring to pinion gear and put a light coat of oil on the left carrier bearing.
5. Place .010" paper gasket on the left side bell and install the left housing over the left axle and position on quick change. Tighten four bolts 90° apart at 25 ft lbs.
6. Install and tighten remaining side bell bolts. Remove from stand and place on the floor.
7. Checking correct carrier bearing adjustment will require two people. With a helper, each grab one side of the axle shaft and rotate them forward at the same speed and time. There should be a heavy drag upon the forward rotation.
8. If the gear turns easily, remove the right axle housing and replace the .010" gasket with a .005" thick gasket (this means it has too much clearance).
9. If the gear does not turn or turns very hard add .005" gasket to the right axle housing (this means there is not enough clearance).
10. Reassemble and re-check drag.
11. Repeat steps 7-9 as necessary. This may take several attempts.
12. Pinion backlash should be between .004-.008 using a dial indicator.
13. If the pinion backlash is too tight, it is necessary to add gasket to the left side.
14. If the pinion backlash is too loose, it is necessary to put in a thinner left side housing gasket.
15. To maintain a proper differential bearing adjustment after adjusting pinion backlash, it will be necessary to balance carrier bearing adjustments. For example, if .005" was added to the left side bell, the right bell gasket must be decreased by .005" and the reverse holds. If the left side bell gasket had .005" removed, then the right bell must have .005" added. This operation may also take several attempts.
16. Re-torque side bell bolts to 30 ft lbs. Check pinion bolt and pinion seal cover bolts.

# BANJO STYLE SET-UP

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| #  | P/N   | DESCRIPTION                | QTY REQ'D |
|----|-------|----------------------------|-----------|
| 1  | 7331  | Pinion Nose Roller Bearing | 1         |
| 2* | 35XXX | Ring and Pinion            | 1         |
| 3  | 7490  | O'Ring                     | 1         |
| 4  | 7554  | Inner Bearing Cone         | 1         |
| 5  | 7569  | Pinion Bearing             | 1         |
| 6  | 7114  | 3/8" SAE Flatwasher        | 6         |
| 7  | 7107  | 3/8-16 x 1 1/4" HHCS       | 6         |
| 8  | 2276  | Crush Sleeve               | 1         |
| 9  | 7553  | Outer Bearing Cone         | 1         |
| 10 | 7260  | Seal                       | 1         |
| 11 | 2216  | Drive Yoke, 1310           | 1         |
| 12 | 2222  | Pinion Nut                 | 1         |

\* When ordering Ring & Pinion add prefix 35 to gear ratio desired. Example: P/N 35457 = 4.57 ratio

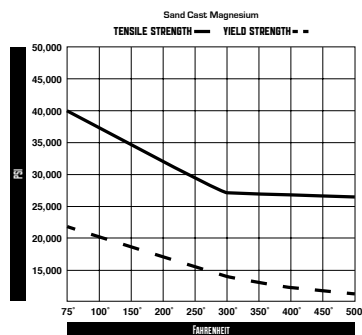
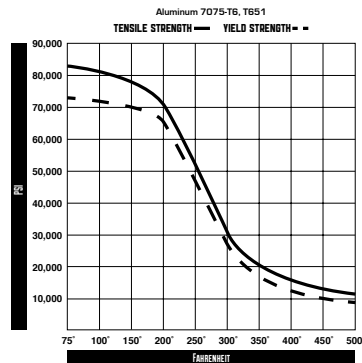
1. Install two each 3/8-16 x 3" guide pins into the center section pinion flange to assure holes line up when pinion is installed.
2. Check and remove any nicks or burrs in the center section pinion bore. Make sure center is clean and free of chemicals or flammable materials.
3. Heat the "clean" center to 270°-300°F in an oven. **DO NOT OVER HEAT as loss of heat treatment or distortion will occur.** Place the pinion in the freezer before attempting installation into the center. Using a cold pinion with a warm center makes installation effortless.
4. Lubricate pinion bearing bore and bearings.
5. Install "chilled" pinion using a urethane (soft) hammer to ensure pinion is seated.
6. Allow assembly to cool to room temperature (68°-72°F) before attempting to adjust the pinion bearing load.
7. Back off pinion nut two turns.
8. With a soft punch (brass or aluminum) and a steel hammer, tap (not strike) on the yoke end of pinion to position pinion nose bearing into the bore properly.
9. Using a yoke spanner and 3/4" drive, 1 1/16" 6 point socket, tighten pinion nut gradually while rotating pinion to allow bearings to align. Adjust pinion bearing preload to 20-25 in lbs.
10. Remove guide studs and install bearing retaining bolts (using anti-seize). Torque to 20-25 ft lbs.

Pinion installation is now complete.



# IMPORTANT INFORMATION

## TYPICAL TENSILE PROPERTIES AT VARIOUS TEMPERATURES



The following typical properties are not guaranteed since in most cases they are averages for various sizes. This data is intended only as a guide when determining metals that best suit your requirements. Refer to Machinery Handbook for strengths of metals, published by Industrial Press, Inc., New York.

| ALUMINUM | TENSILE STRENGTH | YIELD STRENGTH |
|----------|------------------|----------------|
| 7075-T6  | 83000            | 73000          |
| 2024-T3  | 70000            | 50000          |
| 6061-T6  | 45000            | 40000          |

### FACT

Titanium is 60% the weight of steel.

### FACT

Aluminum is approx. 33% the weight of steel.

### FACT

Magnesium is 66% the weight of aluminum.

## BREAK-IN PROCEDURE

As with any new or rebuilt product, be it an engine, transmission or rear end, it is important to avoid premature wear on the gears and bearings by avoiding full throttle loads and high RPM conditions for at least 20 miles. Start break-in at 30% power and gradually increase not to exceed 80% power.

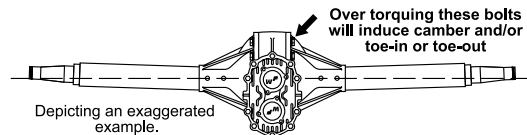
Drain and refill the gear lube in both the rear end and the quick change gear cavity to the proper oil levels with the car sitting level (over filling will cause excessive heat).

Winters recommends the continued use of Winters P/N 1730 with Moly, semi-synthetic lubricant or Mobil 1® for the life of your rear end.

## BELL TORQUING PROCEDURE

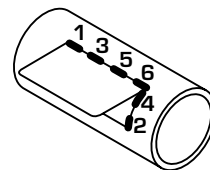
When attaching suspension brackets, exercise care when torquing thru bolts.

Use a torque wrench to tighten bolts in steps. Tighten in a crisscross pattern to 35 ft lbs.



## WELDING BRACKETS TO TUBES

Weld a series of 1/2" long "tacks" along the bracket starting at the ends, then alternate back and forth towards the center. Long continuous welds will heat and "draw" the tubing, causing distortion.

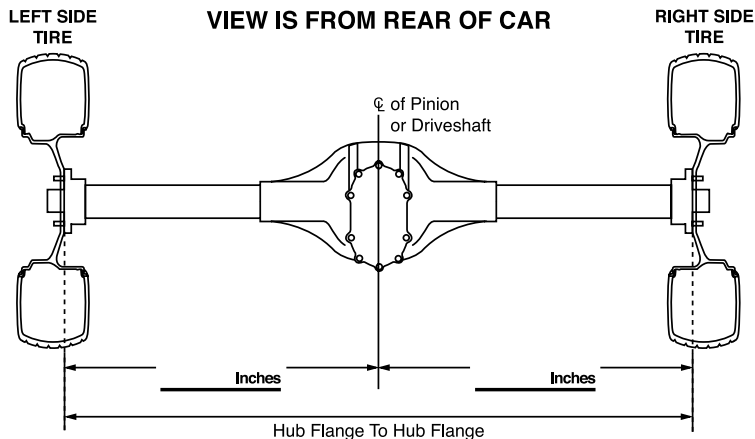


# FLANGED AXLES/REAR END DIMENSIONAL DATA FORM

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## FLANGED AXLE SET P/N SR2980

Made from one piece forgings, these 31 Spline Flanged Axles are of a superior material, heat treat depth and design, which exceeds the strength and durability of stock axles. The induction hardened, non-tapered shaft combined with a ductile flange allows for shortening or bolt pattern changes in the future. Each axle is made to order with your choice of any bolt pattern configuration with 1/2" fine thread or 12mm studs. Set comes complete with bearings installed and heavy duty bearing retainer plates.



**Sign, date and return this form by mail, fax or email**  
(office@wintersperformance.com)

Customer Name \_\_\_\_\_

Customer # \_\_\_\_\_ PO # \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Notes \_\_\_\_\_

**Bolt Pattern** (Ex. 5 x 4 3/4", See Figure A): \_\_\_\_\_

**If ordering Winters Axles, it is extremely important to specify the following:**

**Studs:** ☐ 1/2" Fine Thread

☐ Press In 3874-01 ☐ Screw In 2" Long 4266 ☐ Washer 8812

**Retainer:** ☐ 3374-01 (Big) ☐ 3374-02 (Big Torino®)

**Brake Kit:** ☐ Disc ☐ Drum ☐ Bearing 8687-B

☐ Winters Kit P/N SR4917SS ☐ Winters Kit P/N SR2838

☐ Winters Kit P/N SR4918 ☐ Other \_\_\_\_\_

Pilot Diameter (Center hole in drum or disc) \_\_\_\_\_ Inches (See Figure B)

Brake Offset: ☐ 2.375" ☐ 2.500" ☐ Other \_\_\_\_\_ Inches

**Splines:**

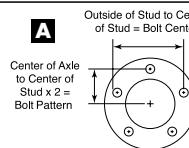
☐ 31

**Housing End:**

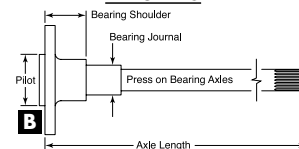
☐ Big Bearing

☐ Big Bearing (Torino®)

### Bolt Pattern Measuring



### Axle Info

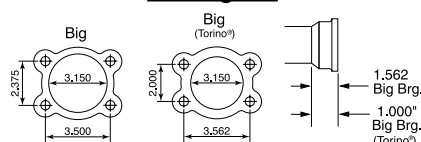


### 12" Lincoln® Drum

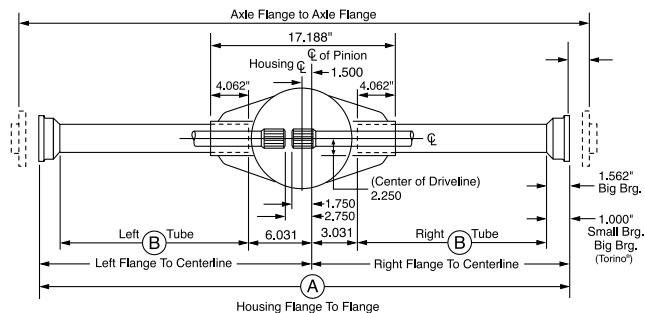
with Torino® Ends

Pilot: 3.254"  
Offset: 3.125"

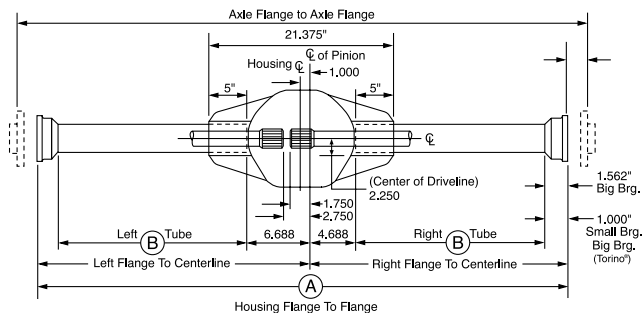
### Housing End



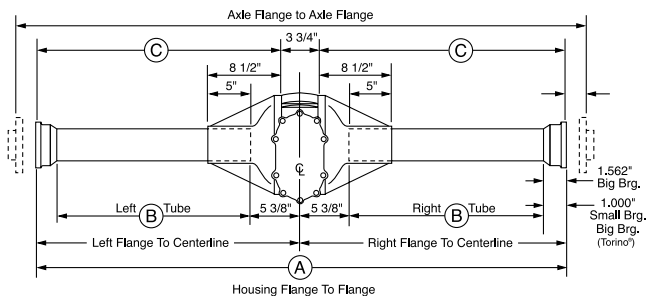
# DIMENSIONAL DATA



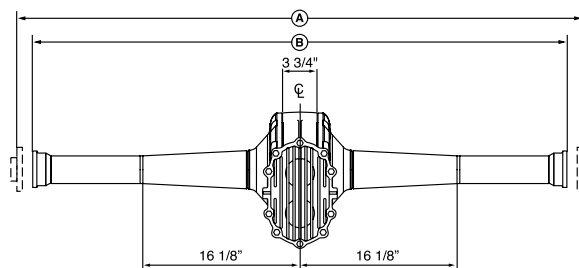
**CHAMPIONSHIP 9"**  
SR92520CR, SR92525CR



**9"**  
SR92520, SR92525

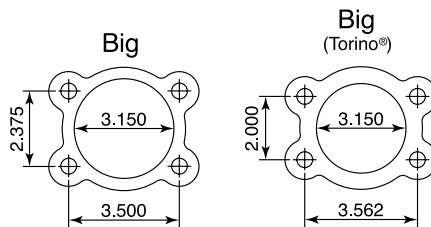


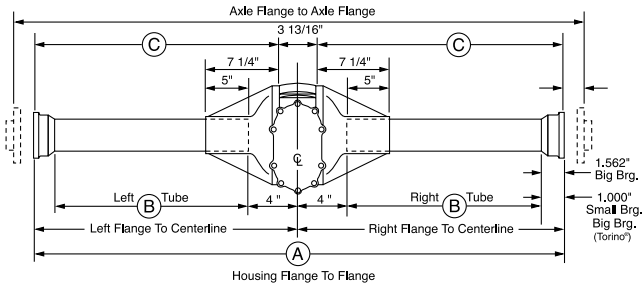
**10" CHAMPIONSHIP QUICK CHANGE**  
SR2520, SR2525  
**10" BANJO-FULL SIZE**  
SR4220, SR4225



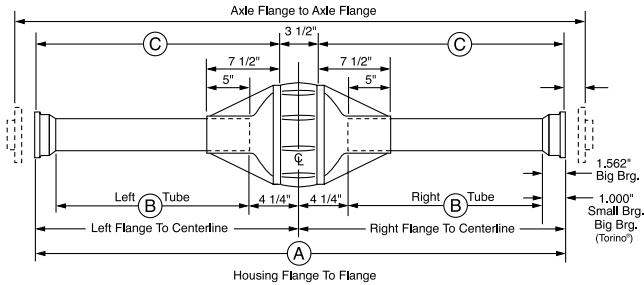
**STEEL TUBE AND BELL CHAMP ADAPTER**  
SR2520STB, SR2525STB

| A  | B  |
|--|--|
| Axle Flange to Axle Flange<br>56" Standard | Housing Flange to Housing Flange<br>51" Standard |

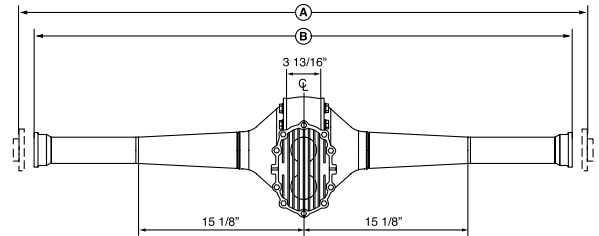




**8 3/8" V8 QUICK CHANGE**  
SR2220, SR2550

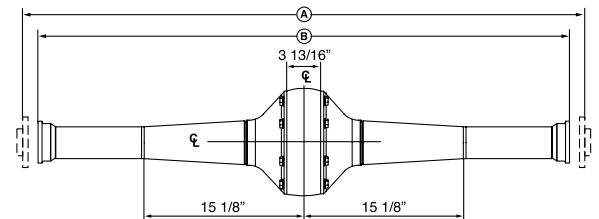


**8 3/8" BANJO STYLE-MINI**  
SR4220M, SR4225M



**STEEL TUBE AND BELL CHAMP ADAPTER**  
SR2220STB, SR2550STB

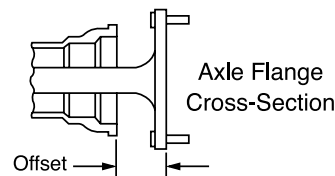
| A  | B  |
|--|--|
| Axle Flange to Axle Flange<br>56" Standard | Housing Flange to Housing Flange<br>51" Standard |



**STEEL TUBE AND BELL BANJO**  
SR4220MSTB, SR4225MSTB

| A  | B  |
|--|--|
| Axle Flange to Axle Flange<br>56" Standard | Housing Flange to Housing Flange<br>51" Standard |

| DESCRIPTION               | OFFSET |
|---------------------------|--------|
| Big Bearing Ford          | 2.36"  |
| Big Bearing Ford          | 2.50"  |
| Big Bearing Ford (Torino) | 2.50"  |



# QUICK CHANGE GEARS

## NEW RE-ENGINEERED HELICAL GEARS

### RE-ENGINEERED FOR QUIETER RUNNING!

All Winters Helical Quick Change Gears have REM® Process Enhanced Surface Finish.




#### 4500 SERIES (6 SPLINE)

| P/N       | LOW SPUR RATIO | HIGH SPUR RATIO | # OF TEETH | 3.78 R&P Ratio<br>(9-34 Teeth) |      |
|-----------|----------------|-----------------|------------|--------------------------------|------|
|           |                |                 |            | LOW                            | HIGH |
| SR4501HR  | 1.000          | 1.000           | 24/24      | 3.78                           | 3.78 |
| SR4502HR  | 0.958          | 1.043           | 23/24      | 3.62                           | 3.94 |
| SR4503HR  | 0.920          | 1.087           | 23/25      | 3.48                           | 4.11 |
| SR4503AHR | 0.880          | 1.136           | 22/25      | 3.33                           | 4.30 |
| SR4504HR  | 0.846          | 1.182           | 22/26      | 3.19                           | 4.47 |
| SR4512HR  | 0.655          | 1.526           | 19/29      | 2.48                           | 5.77 |

#### 6 SPLINE HELICAL GEAR SPACER KIT P/N SR3551

Includes one Spacer P/N SR3416 & the following shims:

| 6 SPLINE SHIMS  |            |           |     |
|---|------------|-----------|-----|
|  | P/N        | THICKNESS | QTY |
|   | SR3442-030 | .030"     | 2   |
|   | SR3442-045 | .045"     | 2   |
|   | SR3442-060 | .060"     | 2   |




#### 8500 SERIES (10 SPLINE)

| P/N       | LOW SPUR RATIO | HIGH SPUR RATIO | # OF TEETH | 4.12 R&P Ratio<br>(8-33 Teeth) |      |
|-----------|----------------|-----------------|------------|--------------------------------|------|
|           |                |                 |            | LOW                            | HIGH |
| SR8503HR  | 0.806          | 1.240           | 25/31      | 3.32                           | 5.11 |
| SR8504HR  | 0.774          | 1.292           | 24/31      | 3.19                           | 5.32 |
| SR8509AHR | 0.833          | 1.200           | 25/30      | 3.43                           | 4.94 |
| SR8517HR  | 0.867          | 1.154           | 26/30      | 3.57                           | 4.75 |
| SR8526HR  | 0.931          | 1.074           | 27/29      | 3.84                           | 4.43 |

#### 10 SPLINE HELICAL GEAR SPACER KIT P/N SR3552

Includes one Spacer P/N SR3417 & the following shims:

| 10 SPLINE SHIMS   |            |           |     |
|---|------------|-----------|-----|
|  | P/N        | THICKNESS | QTY |
|   | SR3430-030 | .030"     | 2   |
|   | SR3430-045 | .045"     | 2   |
|   | SR3430-060 | .060"     | 2   |

## 30800 SERIES GEARS

Standard Quick Change Gears. When ordering add prefix 308 to set number. Example: SR30801

#### XTREMLINER (30800 SERIES)

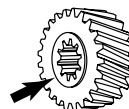
| GEAR SET # | LOW SPUR RATIO | HIGH SPUR RATIO | # OF TEETH | 2.00 R&P Ratio<br>(17-34 Teeth) |      | 3.08 R&P Ratio<br>(12-37 Teeth) |      |
|------------|----------------|-----------------|------------|---------------------------------|------|---------------------------------|------|
|            |                |                 |            | LOW                             | HIGH | LOW                             | HIGH |
| 01         | 1.00           | 1.00            | 21/21      | 2.00                            | 2.00 | 3.08                            | 3.08 |
| 15         | 0.95           | 1.05            | 19/20      | 1.90                            | 2.10 | 2.93                            | 3.23 |
| 25         | 0.90           | 1.10            | 20/22      | 1.82                            | 2.20 | 2.77                            | 3.39 |
| 17A        | 0.85           | 1.16            | 24/28      | 1.71                            | 2.33 | 2.62                            | 3.57 |
| 03         | 0.80           | 1.24            | 25/31      | 1.61                            | 2.48 | 2.46                            | 3.82 |
| 16         | 0.75           | 1.33            | 18/24      | 1.50                            | 2.67 | 2.31                            | 4.11 |
| 14         | 0.71           | 1.39            | 23/32      | 1.44                            | 2.78 | 2.19                            | 4.28 |
| 36         | 0.68           | 1.47            | 17/25      | 1.36                            | 2.94 | 2.09                            | 4.53 |
| 21         | 0.65           | 1.52            | 19/29      | 1.31                            | 3.05 | 2.00                            | 4.68 |
| 28         | 0.63           | 1.57            | 19/30      | 1.27                            | 3.16 | 1.94                            | 4.83 |
| 31         | 0.60           | 1.66            | 21/35      | 1.20                            | 3.33 | 1.84                            | 5.11 |

HIGH

LOW



Remember to refill gear cavity with good quality lube after quick change gear changes. Install quick change gears with the shoulder facing toward gear cover bearings.



#### IMPORTANT

Install quick change gears with shoulder facing toward gear cover bearings.

# QUICK CHANGE GEARS

85

## 8500 SERIES GEARS

Standard Quick Change Gears. When ordering add prefix 85 to set number. Example: SR8501

| 10 SPLINE (8500 SERIES) |                |                 |            | 4.12 R&P Ratio<br>(8-33 Teeth) |      |
|-------------------------|----------------|-----------------|------------|--------------------------------|------|
| GEAR SET #              | LOW SPUR RATIO | HIGH SPUR RATIO | # OF TEETH | LOW                            | HIGH |
| 01                      | 1.000          | 1.000           | 21/21      | 4.12                           | 4.12 |
| 02                      | 0.964          | 1.037           | 27/28      | 3.97                           | 4.27 |
| 05                      | 0.960          | 1.042           | 24/25      | 3.96                           | 4.29 |
| 15A                     | 0.955          | 1.048           | 21/22      | 3.93                           | 4.32 |
| 15                      | 0.950          | 1.053           | 19/20      | 3.91                           | 4.34 |
| 26                      | 0.931          | 1.074           | 27/29      | 3.84                           | 4.43 |
| 06                      | 0.920          | 1.087           | 23/25      | 3.79                           | 4.48 |
| 25                      | 0.909          | 1.100           | 20/22      | 3.75                           | 4.53 |
| 12                      | 0.897          | 1.115           | 26/29      | 3.69                           | 4.60 |
| 07                      | 0.885          | 1.130           | 23/26      | 3.65                           | 4.66 |
| 07A                     | 0.875          | 1.143           | 21/24      | 3.61                           | 4.71 |
| 17                      | 0.867          | 1.154           | 26/30      | 3.57                           | 4.75 |
| 17A                     | 0.857          | 1.167           | 24/28      | 3.53                           | 4.81 |
| 08A                     | 0.852          | 1.174           | 23/27      | 3.51                           | 4.84 |
| 08                      | 0.846          | 1.182           | 22/26      | 3.49                           | 4.87 |
| 19                      | 0.840          | 1.190           | 21/25      | 3.46                           | 4.91 |
| 09A                     | 0.833          | 1.200           | 25/30      | 3.43                           | 4.94 |
| 09                      | 0.826          | 1.211           | 19/23      | 3.40                           | 4.99 |
| 11                      | 0.815          | 1.227           | 22/27      | 3.36                           | 5.06 |
| 03                      | 0.806          | 1.240           | 25/31      | 3.32                           | 5.11 |
| 13                      | 0.800          | 1.250           | 20/25      | 3.30                           | 5.15 |
| 18                      | 0.793          | 1.261           | 23/29      | 3.27                           | 5.20 |
| 18A                     | 0.786          | 1.273           | 22/28      | 3.24                           | 5.24 |
| 04A                     | 0.783          | 1.278           | 18/23      | 3.22                           | 5.26 |
| 20A                     | 0.778          | 1.286           | 21/27      | 3.20                           | 5.30 |
| 04                      | 0.774          | 1.292           | 24/31      | 3.19                           | 5.32 |
| 20                      | 0.769          | 1.300           | 20/26      | 3.17                           | 5.36 |
| 22                      | 0.760          | 1.316           | 19/25      | 3.13                           | 5.42 |
| 16                      | 0.750          | 1.333           | 18/24      | 3.09                           | 5.49 |
| 10                      | 0.739          | 1.353           | 17/23      | 3.05                           | 5.57 |
| 10A                     | 0.733          | 1.364           | 22/30      | 3.02                           | 5.62 |
| 34                      | 0.724          | 1.381           | 21/29      | 2.97                           | 5.69 |
| 34A                     | 0.727          | 1.375           | 16/22      | 3.00                           | 5.67 |
| 14                      | 0.719          | 1.391           | 23/32      | 2.96                           | 5.73 |

More SR8500 Series Gear Sets available. Call for more info or visit our web site.

### To Determine Final Drive:

(# Teeth Top Gear) ÷ (# Teeth Bottom Gear) x R&P Ratio = Final Drive

## 4500 SERIES GEARS

Standard Quick Change Gears. When ordering add prefix 45 to set number. Example: SR4501

| 6 SPLINE (4500 SERIES 1 3/8" WIDE) |                |                 |            | 3.78 R&P Ratio<br>(9-34 Teeth) |      |
|------------------------------------|----------------|-----------------|------------|--------------------------------|------|
| GEAR SET #                         | LOW SPUR RATIO | HIGH SPUR RATIO | # OF TEETH | LOW                            | HIGH |
| 01                                 | 1.00           | 1.000           | 24/24      | 3.78                           | 3.78 |
| 02                                 | 0.985          | 1.043           | 23/24      | 3.62                           | 3.94 |
| 03                                 | 0.920          | 1.087           | 23/25      | 3.48                           | 4.11 |
| 03B                                | 0.895          | 1.118           | 17/19      | 3.38                           | 4.22 |
| 03A                                | 0.880          | 1.136           | 22/25      | 3.33                           | 4.30 |
| 04                                 | 0.846          | 1.182           | 22/26      | 3.20                           | 4.47 |
| 05                                 | 0.808          | 1.238           | 21/26      | 3.05                           | 4.68 |
| 05A                                | 0.792          | 1.263           | 19/24      | 2.99                           | 4.77 |
| 06                                 | 0.778          | 1.286           | 21/27      | 2.94                           | 4.86 |
| 24                                 | 0.767          | 1.304           | 23/30      | 2.90                           | 4.93 |
| 25                                 | 0.750          | 1.333           | 18/24      | 2.84                           | 5.04 |
| 07                                 | 0.741          | 1.350           | 20/27      | 2.80                           | 5.10 |
| 23                                 | 0.727          | 1.375           | 16/22      | 2.75                           | 5.20 |
| 08                                 | 0.714          | 1.400           | 20/28      | 2.70                           | 5.29 |
| 22                                 | 0.704          | 1.421           | 19/27      | 2.66                           | 5.37 |
| 09                                 | 0.696          | 1.438           | 16/23      | 2.63                           | 5.43 |
| 10                                 | 0.682          | 1.467           | 15/22      | 2.58                           | 5.54 |
| 11                                 | 0.667          | 1.500           | 18/27      | 2.52                           | 5.67 |
| 12                                 | 0.655          | 1.526           | 19/29      | 2.48                           | 5.77 |
| 13                                 | 0.652          | 1.533           | 15/23      | 2.47                           | 5.80 |
| 14                                 | 0.636          | 1.571           | 14/22      | 2.41                           | 5.94 |
| 15                                 | 0.625          | 1.600           | 15/24      | 2.36                           | 6.05 |
| 16                                 | 0.615          | 1.625           | 16/26      | 2.33                           | 6.14 |
| 17                                 | 0.600          | 1.667           | 18/30      | 2.27                           | 6.30 |
| 18                                 | 0.591          | 1.692           | 13/22      | 2.23                           | 6.40 |
| 18A                                | 0.571          | 1.750           | 16/28      | 2.16                           | 6.62 |
| 19                                 | 0.560          | 1.786           | 14/25      | 2.12                           | 6.75 |
| 20                                 | 0.556          | 1.800           | 15/27      | 2.10                           | 6.80 |
| 27                                 | 0.542          | 1.846           | 13/24      | 2.05                           | 6.98 |
| 21                                 | 0.531          | 1.882           | 17/32      | 2.01                           | 7.12 |
| 28                                 | 0.528          | 1.895           | 19/36      | 2.00                           | 7.16 |
| 29                                 | 0.522          | 1.917           | 12/23      | 1.97                           | 7.25 |
| 26                                 | 0.517          | 1.933           | 15/29      | 1.96                           | 7.31 |
| 30                                 | 0.500          | 2.000           | 20/40      | 1.89                           | 7.56 |
| 31                                 | 0.488          | 2.050           | 20/41      | 1.84                           | 7.75 |
| 32                                 | 0.475          | 2.105           | 19/40      | 1.80                           | 7.95 |

### To Determine Gear RPM Change:

(RPM) ÷ (Gear Ratio) x (New Ratio) = (New RPM)

Example:  $3000 \div 3.93 \times 3.43 = 2618$

# LIMITED WARRANTY

## **BACKGROUND**

Winters Performance Products, Inc., referred to herein as Winters, manufactures parts and equipment which are purchased by persons in various industries, who may install and use Winters parts and equipment in applications which may not be suitable for that Purchaser's intended purpose. Purchaser understands, recognizes and acknowledges that all parts and equipment manufactured or sold by Winters are exposed to many, varied and unforeseeable uses and conditions. As a consequence, Winters can make no promise, warranty, affirmation or representation as to the performance of its parts or equipment, nor does Winters make any description of the parts or equipment sold to Purchaser, nor does Winters make any description or affirmation of fact concerning any sample or model of parts or equipment except as specifically set forth in this Limited Warranty. As further consideration for Purchaser using Winters' parts or equipment, Purchaser acknowledges that, due to differing conditions and circumstances under which all parts and equipment are installed and used, Purchaser is not relying on Winters' skill and judgement to select or furnish the proper part or equipment. Purchaser expressly affirms that it is relying on its own expertise, skill, and judgement to select, purchase and install parts or equipment which are suitably safe and durable for their intended purpose. Purchaser assumes all risks associated with the performance of Winters' parts.

## **LIMITED WARRANTY**

Winters warrants to Purchaser that any part or equipment manufactured by Winters ("a Part") will conform to the description of such Part contained in the catalog most recently published by Winters prior to the time of sale of such part or equipment to Purchaser ("the Description"). WINTERS MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED WITH RESPECT TO ANY PART. WINTERS EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE AND EXPRESSLY DISCLAIMS ANY WARRANTY AS TO THE PERFORMANCE OF ANY PART. The liability of Winters for breach of the foregoing warranty is limited to repair or replacement of any Part determined to fail to conform to its Description prior to installation and use. The burden of establishing that any Part fails to conform to its Description shall be upon Purchaser. In order to be entitled to repair or replacement of any Part, Purchaser must (i) inspect the part upon receipt; and (ii) notify Winters in writing of the defect PRIOR TO INSTALLATION OF THE PART. In no event shall Winters be liable hereunder for any Part which has been installed. Purchaser assumes all risks relating to a Part once such Part is installed. WINTERS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES (INCLUDING BUT NOT LIMITED TO LOST PROFITS) OR FOR LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF A PART. Every claim under this Limited Warranty shall be deemed waived unless made in writing within ninety (90) days of delivery of the Part by Winters to Purchaser. Purchaser acknowledges that, due to the multiple uses of Parts, it is impossible for Winters to predict the performance of any Parts once installed or the suitability of any Parts for any particular use. Purchaser expressly acknowledges its obligation to inform all users (customers) of the above disclaimer.

## **INDEMNITY AGAINST THIRD PARTY CLAIMS**

PURCHASER HEREBY AGREES TO INDEMNIFY AND HOLD HARMLESS WINTERS FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITY, LOSS AND DAMAGES, INCLUDING ATTORNEYS FEES, MADE BY ANY THIRD PARTY AGAINST WINTERS RELATING TO A PART OR THE USE OF ANY PART. Purchaser understands and agrees that no officer, director, employee or agent of Winters (including but not limited to any vendor, dealer or distributor) has any authority to make any statements contrary to the terms of this Limited Warranty. Winters specifically disavows any statements contrary to what is written above.

## **CHOICE OF LAW/VENUE**

This Limited Warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. Any legal action which may arise as a result of disputes, controversies, or claims arising out of or related to this Limited Warranty or the purchase or use of any Part shall be litigated exclusively in the Court of Common Pleas of York County, Pennsylvania or the United States District Court for the Middle District of Pennsylvania.

## **MISCELLANEOUS**

This writing constitutes the full, complete and final statement of Winters' Limited Warranty for Parts. All prior oral and written correspondence, test data, negotiations, representations, understandings and the like regarding Parts are merged in this writing and extinguished by it. This Limited Warranty may not be altered, amended, extended or modified except by a writing signed by the President or Vice President of Winters. Winters' failure at any time to enforce any of the terms and conditions stated herein shall not constitute a waiver of any of the provisions herein. This Limited Warranty shall not be assigned by Purchaser. Winters' responsibility for merchandise shipped via common carrier ceases upon delivering the order to the carrier. Winters is not responsible for merchandise lost or damaged in transit. Purchaser must file a claim with the delivery carrier for merchandise lost or damaged during transit. Winters will assist Purchaser by supplying any information necessary for submission of a claim. It is the responsibility of the Purchaser to comply with all laws and regulations, Federal, State and Local, governing resale of products sold by Winters. NSF Charge: \$38.00 per returned check/payment. Repayments must be made by cashier check or money order.

On request, all parts in Winters Performance Products, Inc. inventory and/or catalog are available in super strength heat treated steel (300,000/350,000 P.S.I. tensile strength) at extra cost and special order. Refer to machinery handbook for strengths of other materials.

RACING IS A DANGEROUS SPORT THAT CAN RESULT IN SERIOUS INJURY OR DEATH. THE ULTIMATE RESPONSIBILITY FOR PARTICIPANT AND VEHICLE SAFETY LIES WITH THE PARTICIPANT.

[www.wintersperformance.com](http://www.wintersperformance.com)

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