

# Ring & Pinions

RICHMOND™ is the leading manufacturer of professional quality, high performance ring and pinion sets. For over 80 years, the Double Diamond has signified the highest quality gears in the racing industry!



## HIGH PERFORMANCE RING & PINIONS

Richmond Gear is the leading manufacturer of pro-quality, hi-performance ring & pinion sets. For over eighty years, the "Double Diamond" logo has signified the highest quality gears in the racing industry. Richmond offers a wide selection of gear ratios for all popular rear ends in both Street-Gear design & Pro-Gear (drag racing). Listed are just a few, call if not shown.

### GM 10 bolt 7.5"

77-02 GM cars, 82-02 Camaro, Firebird, Trans AM & 83-02 S-10 Trucks, 1.438" diameter pinion 27 spline. Installation kits recommended: 83-1044-1 or 83-1044B

RATIO	TEETH	PART NO.	NOTE
3.42	41-12	49-0045-1	3
3.42	41-12	49-0005-1	2
3.73	41-11	49-0046-1	3
3.73	41-11	49-0007-1	2
4.10	41-10	69-0322-1	3
4.10	41-10	49-0009-1	2
4.56	41-9	69-0324-1	3*
4.56	41-9	69-0326-1	2*

Notes: (2) denotes 3.08 ratio and numerically lower carrier (3) denotes 3.23 ratio and numerically higher carrier. \*Must replace cross pin with #80-0270-1.

### GM 10 bolt 8.2"

Commonly used in GM applications from 1964 to 1972. 25 spline w/1.438 diameter pinion. Installation kits recommended: 83-1022-1 or 83-1022B

RATIO	TEETH	PART NO.	NOTE
3.55	39-11	49-0015-1	
3.73	41-11	49-0112-1	
4.11	37-9	69-0159-1	

### GM 10 bolt 8.5"

Commonly used in GM applications from 1970 and up. 30 spline w/1.626 diameter pinion. Installation kits recommended: 83-1021-1 or 83-1021B

RATIO	TEETH	PART NO.	NOTE
3.42	41-12	49-0278-1	
3.70	37-10	49-0033-1	
3.73	41-11	49-0041-1	
3.90	39-10	49-0034-1	
4.10	41-10	69-0165-1	
4.56	41-9	69-0167-1	
4.88	39-8	69-0169-1	
5.13	41-8	69-0171-1	

### GM 12 bolt Car

Known as the "C" axle used in GM cars 1965 to 1972. 8.875" diameter, 30 spline w/1.626 diameter pinion. Installation kits recommended: 83-1019-1 or 83-1019B

RATIO	TEETH	PART NO.	NOTE
3.42	41-12	49-0113-1	2
3.55	39-11	49-0095-1	2
3.73	41-11	49-0039-1	2
3.73	41-11	49-0096-1	3
4.10	41-10	69-0304-1	2
4.10	41-10	69-0031-1	3
4.56	41-9	69-0306-1	2
4.56	41-9	69-0032-1	2
4.88	39-8	69-0308-1	3
4.88	39-8	69-0033-1	3

Notes: (2) denotes 3.07-3.73 ratio carrier (3) denotes 3.90 ratio and numerically higher carrier.

### GM 12 bolt Truck

Found in GM truck and vans from 1964 through 1982. 30 spline w/1.438 diameter pinion. Installation kits recommended: 83-1018-1 or 83-1018B

RATIO	TEETH	PART NO.	NOTE
3.42	41-12	49-0070-1	2
3.73	41-11	49-0280-1	3
3.73	41-11	49-0072-1	2
4.10	41-10	69-0204-1	3
4.10	41-10	69-0350-1	2
4.56	41-9	69-0206-1	3
4.88	39-8	69-0298-1	3

Notes: (2) denotes 3.40 ratio and numerically lower carrier (3) denotes 3.73 ratio and numerically higher carrier.

### Dana 60

Chrysler and Jeep applications from 1966-1984, Ford Trucks from 1967-1995, and HD Chevy trucks from 1969-1995. 29 spline with 1.626" pinion diameter. Installation kits recommended: 83-1034-1 or 83-1034B

RATIO	TEETH	PART NO.	NOTE
4.10	41-10	69-0052-1	
4.56	41-9	69-0053-1	
4.88	39-8	69-0054-1	
5.13	41-8	69-0057-1	

### Ford 8.8"

Commonly used in Mustangs and PU trucks 81-94. 30 spline w/1.626 diameter pinion. Installation kits recommended: 83-1043-1 or 83-1043B

RATIO	TEETH	PART NO.	NOTE
3.55	39-11	49-0103-1	
3.73	41-11	49-0104-1	
4.10	41-10	69-0310-1	
4.33	39-9	69-0376-1	
4.56	41-9	69-0312-1*	
4.88	39-8	69-0382-1*	

\* Replacement cross pin # 80-0273-1 required, except for 87-97 trucks which use 80-0279-1.

### Ford 9.0"

The most common Ford RWD differential. Used in fullsize cars and trucks from 1957 to 1987. 28 spline w/1.313 diameter pinion. Installation kits recommended: 83-1011-1 or 83-1011B

RATIO	TEETH	PART NO.	NOTE
3.50	35-10	49-0027-1	
3.70	37-10	69-0361-1	
3.89	35-9	69-0177-1	
4.11	37-9	69-0179-1	
4.33	39-9	69-0161-1	
4.56	41-9	69-0185-1	
4.86	34-7	69-0067-1	
5.14	36-7	69-0068-1	
5.43	38-7	69-0069-1	
5.67	34-6	69-0070-1	



## SYNTHETIC GEAR OIL

Help to ensure a long life for your ring and pinion gear set using Richmond Synthetic Gear Oil. Improved durability and efficiency are the primary benefits of using a gear oil formulated especially for high performance differentials. Provides unequalled protection under demanding conditions.



Part No. Lube



## PRO GEARS

### Ford 9.0"

RATIO	TEETH	PART NO.	NOTE
3.89	35-9	79-0043-1	1
4.11	37-9	79-0045-1	1
4.29	30-7	79-0079-1	1
4.57	32-7	79-0080-1	1
4.86	34-7	79-0066-1	
5.14	36-7	79-0017-1	

1. Special pinion support - 35 SPL



## Do I need Pro Gears?

Pro Gears can be used in vehicles that are for drag race only. They are not suitable for street-strip vehicles.

1. If the drag vehicle has a manual transmission, a Pro Gear is generally used.
2. If the drag vehicle has a transmission brake, a Pro Gear is needed.
3. If the drag vehicle generates 600-700+ horsepower, a Pro Gear is needed.
4. If the drag vehicle has tires that are 15" or wider, a Pro Gear is needed.
5. If the drag vehicle is at or over 3,500 lbs., a Pro Gear is needed.
6. If the drag vehicle consistently breaks a street gear, a Pro Gear is needed.
7. If the drag racer wants more security and dependability in the drivetrain.
8. If the drag racer wants to win.

Pro Light gears have become very popular because weight is removed from the back of the ring gear. This reduces the rotating mass by approximately 4-6 lbs. depending on the size of the ring gear. Drag racers say that any rotating mass reduction is beneficial. Pro Gears are manufactured from a special high nickel steel and specifically heat treated for drag race applications.



## RING & PINION INSTALLATION KITS

From performance quality grade 8 bolts to the gasket, Richmond Gear Installation Kits include all parts required for a complete ring & pinion installation utilizing all new components. All popular applications are available. Everything you need for a complete ring & pinion installation: Cover gasket, Ring gear bolts and washers, Crush sleeve, Marking compound and brush, Pinion and carrier bearings, Pinion nut and washer, Pinion seal, Thread locking compound, Silicone sealer, Pinion and carrier shims.



# Extreme Traction Systems

Easily upgrade your vehicle for Extreme-Traction performance! Powertrax® offers two series of extreme traction differentials to satisfy the most demanding requirements.



## POWERTRAX® No-Slip Traction System™

### POWERTRAX® NO-SLIP TRACTION SYSTEM

Unleash your performance vehicle's maximum power or give your truck/SUV the ability to get just about anywhere. Extreme traction is just a simple upgrade away. Powertrax No-Slip provides exceptionally smooth and quiet operation. There are no friction clutches to wear out and no special lubricants required. Easily converts your "open", limited slip or locking differential for superior traction output.

- Smooth, quiet operation- fully automatic
- Ideal for both street and off road
- Positive traction- full locker
- Ultimate traction for 2 & 4 Wd vehicles
- Installs in about 1 hour

APPLICATION	Powertrax® No-Slip	Lock Right®
<b>Chrysler</b>		
8.25" 27 Spline	2705	1230
8.25" 29 Spline	2905	----
9.25" 31 Spline	3105	1220
<b>Dana 44</b>		
8.5" 27 Open spline	2700	2414
8.5" 30 Open spline	3000	2410
8.5" 30 Open IFS spline	3001	2410
<b>Dana 60 Open</b>		
9.75" Non C-clip 30 Spline	3000	2610
9.75" C-clip 30 Spline	3005	2610
<b>Ford 8.0 Open</b>		
8.00" 28 Spline	2800	1810
<b>Ford 8.8-3/4" shaft</b>		
8.8" 28 Spline	2807	1820
8.8" 31 Spline	3107	1821



## LOCK RIGHT® POWERTRAX

### LOCK RIGHT®

Lock-Right lockers are brute force devices for rugged truck applications. They provide the best value for greatly increasing the traction of 2-wheel drive and 4x4 trucks and Jeeps. Installation is simple because the ring and pinion setups are not altered. Installs easily in rear axle, front axle, or both.

- Best suited for extreme
- Off-road to severe on-road use.
- Brute force for rugged applications-on and off-road
- Best value for increasing traction in 2 and 4 WD vehicles
- Positive traction, full locker

APPLICATION	Powertrax® No-Slip	Lock Right®
<b>Ford 8.8 7/8" shaft open</b>		
8.8" 28 Spline	3108	1822
<b>Ford 9"</b>		
9" 31 Spline	3100	1810
<b>GM 10 Bolt</b>		
7.5" 26 Spline	2605	1930
7.625" 26 Spline	2605	1932
7.625" 28 Spline	2805	1931
8.5" 28 Spline	2805	1920
8.5" 30 Spline	3005	1921
8.625" 30 Spline	3005	----
<b>GM 12 Bolt-Open</b>		
8.875" 30 Spline	3005	1910
<b>GM 14 Bolt- Open</b>		
9.5" 33 Spline	3305	1950
10.5" 30 Spline	3000	1955

# Transmissions & Accessories

RICHMOND™ is the leading manufacturer of professional quality, high performance ring and pinion sets. For over 80 years, the Double Diamond has signified the highest quality gears in the racing industry!



## SUPER STREET 5-SPEED w/OVERDRIVE

The new Richmond Super Street Transmission is a high performance manual transmission designed to be a bolt-in replacement for both Ford and GM vehicles. The Super Street is fully rated at 600 ft. lbs. of torque to confidently handle the demands of street performance, hot rods, muscle cars, racing and other high performance applications. Ratios are available for smooth and aggressive acceleration: First Gear 3.33 or 2.89, Second Gear 1.85, Third Gear 1.31, Fourth Gear 1:1, and Fifth Gear (over drive) 0.77. The Super Street comes standard with a Long shifter for the ultimate in shift performance and durability.



APPLICATION	PART NO.
GM applications 1-1/8"-10 spline	7020510
GM applications 1-1/8"-26 spline	7020526
Ford Small Block, Big Block with modification of pilot	7040526
Ford 1978-83 5.0L	7040510

## T-10 4-SPEED MANUAL TRANSMISSION

Richmond Gear T-10 is a four speed countershaft helical gear transmission, synchronized in all forward gears. First & reverse are constant mesh to prevent gear clash. Strut-type synchronizers are provided for longer life & easier shifting. Used for performance type auto's & light trucks. Other ratios available.



SPECIFICATIONS					
1st	2nd	3rd	4th	5th	PART NO.
2.43	1.61	1.23	1.00	2.35	1304000070
2.64	1.75	1.34	1.00	2.55	1304000069
2.88	1.91	1.33	1.00	2.78	1304000072



## RICHMOND SPOOLS AND MINI-SPOOLS

### All Richmond Spools . . .

- Are CAD/CAM designed for lightest weight yet optimum strength
- Are CNC machined 4140 forged and are fully heat treated to aircraft specifications
- Have minimum run out to allow the optimum pattern for performance and life
- Are race proven at strip and track

Rear End Type	Type	Matl	Spline Count #	Part
Ford 9"	Mini	Steel	28	78-0928-1
Ford 9"	Mini	Steel	31	78-0931-1
GM 8.5" 10 Bolt	Mini	Steel	28	78-1028-1
GM 8.2" 10 Bolt	Mini	Steel	28	78-8228-1
GM 12" Bolt Car	Mini	Steel	30	78-1230-1
Ford 8.8"	Mini	Steel	28	78-8828-1
Ford 8.8"	Mini	Steel	31	78-8831-1
GM 7.5"	Mini	Steel	26	78-7526-1
Dana 44	Mini	Steel	30	78-4430-1



## PROMOTIVE RING AND PINION GEAR SETS

Promotive now offers precision made ring and pinion gear sets for popular applications. These sets start with high quality gear forgings that are machined to tolerances equal to or exceeding OE specs. Then each piece is carefully heat treated for proper durability and shock load resistance. The result is a gear set that will offer exceptional service in tough street or strip application use.



Application	Part No.	Application	Part No.	Application	Part No.
FORD 8.8" 3.55	7000355	FORD 9" 5.14	7001514	GM 7.5 10 BLT, 4.10 OEM	7010410
FORD 8.8" 3.73	7000373	FORD 9" 5.29	7001529	GM 7.5 10 BLT, 4.10 Thick	7011410
FORD 8.8" 4.10	7000410	FORD 9" 5.43	7001543	GM 8.2 10 BLT, 4.11	7012411
FORD 8.8" 4.56	7000456	FORD 9" 5.67	7001567	GM 8.5 10 BLT, 3.42	7012342
FORD 9" 3.50	7001350	FORD 9" 5.83	7001583	GM 8.5 10 BLT, 3.73	7012373
FORD 9" 3.70	7001370	FORD 9" 6.00	7001600	GM 8.5 10 BLT, 4.10	7012410
FORD 9" 3.89	7001389	FORD 9" 6.20	7001620	GM 8.5 10 BLT, 4.56	7012456
FORD 9" 4.11	7001411	FORD 9" 6.33	7001633	GM 12 BLT, 8,875, 3.42	7013342
FORD 9" 4.33	7001433	FORD 9" 6.50	7001650	GM 12 BLT, 8,875, 3.73	7013373
FORD 9" 4.56	7001456	GM 7.5 10 BLT, 3.42 OEM	7010342	GM 12 BLT, 8,875, 4.10	7013410
FORD 9" 4.71	7001471	GM 7.5 10 BLT, 3.42 Thick	7011342	GM 12 BLT, 8,875, 4.56	7013456
FORD 9" 4.86	7001486	GM 7.5 10 BLT, 3.73 OEM	7010373		
FORD 9" 5.00	7001500	GM 7.5 10 BLT, 3.73 Thick	7011373		