

# **TERAFLEX**

*Heavy Duty Axle Assemblies for the Jeep Wrangler*

**TERA  
60**

**CRD  
60**



Extreme Duty Tera 60 8 Lug with SlimLock Hubs



Extreme Duty Full Float CRD60 8 Lug



Heavy Duty Tera60 5 Lug Unit Bearing



Heavy Duty Semi Float CRD60 5 Lug

**IMPORTANT:** Follow the axle break in procedures found on page 14. When replacing the gear oil, we recommend the use of a high-quality synthetic lube, such as Redline, to achieve long gear life.

**MAINTENANCE INTERVALS:** Replace your gear oil as needed depending on use and conditions (e.g., frequent water crossings, mud bogging), or as recommended by your vehicles factory maintenance manual.

**RHD Applications Available!**

# TeraFlex Tera60 and CRD60 Axles

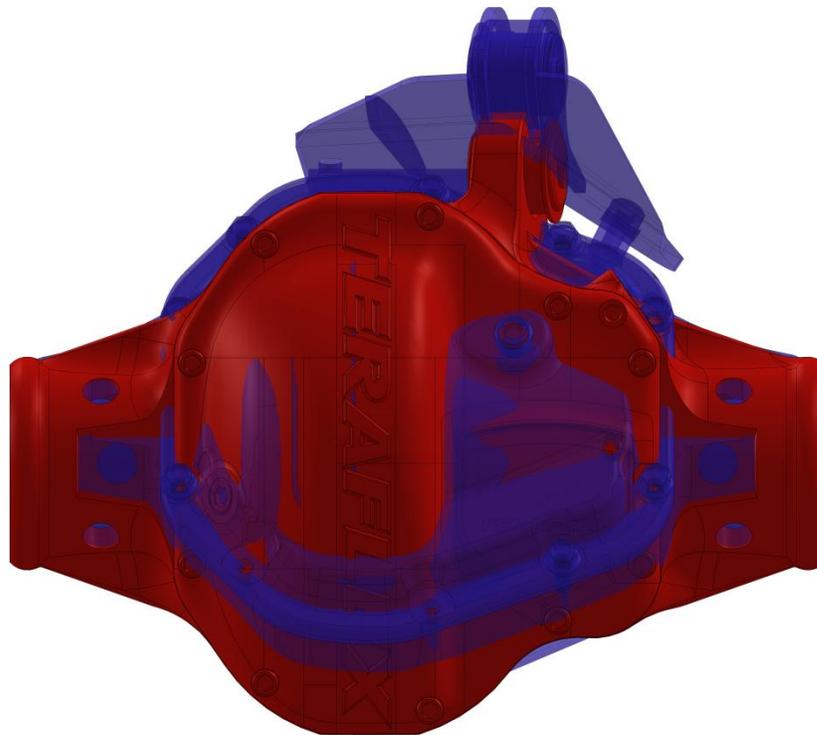
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TeraFlex developed the first Jeep specific axle in 2002. Since then, TeraFlex axles have been refined and developed to be the ultimate Jeep specific replacement axle.

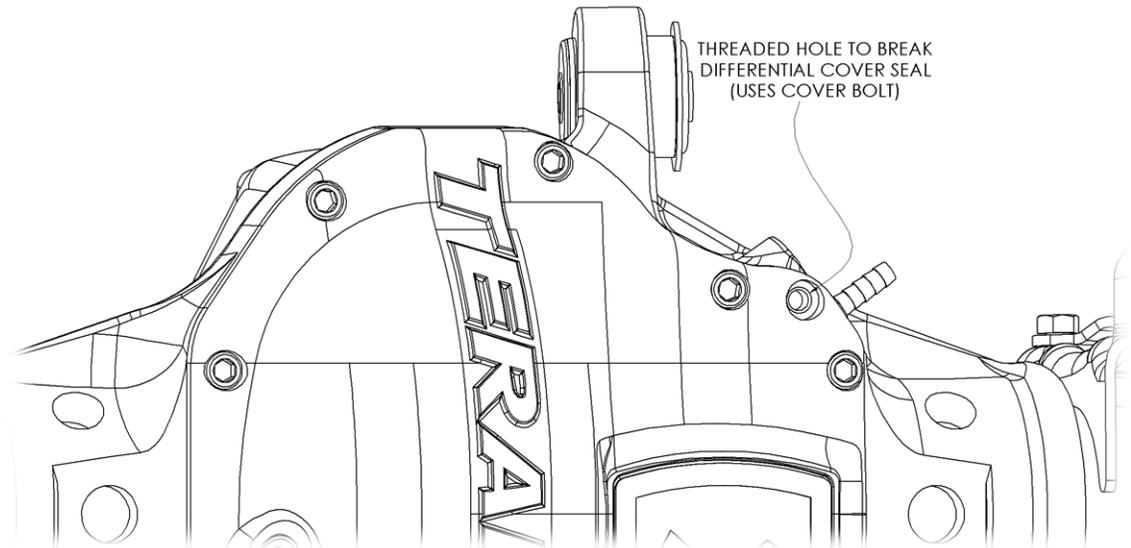
## Front Tera60

The Tera60 high pinion axle has been designed with packaging in mind. The housing has been engineered for maximum ground clearance and suspension up travel. Finite element analysis (FEA) tools were used throughout the many axle development stages to optimize the strength while reducing the weight of the axle components; ensuring the Tera60 would handle the rigorous off road it will be subject to. When compared to the CRD60 front axle, the Tera60 boasts several improvements.

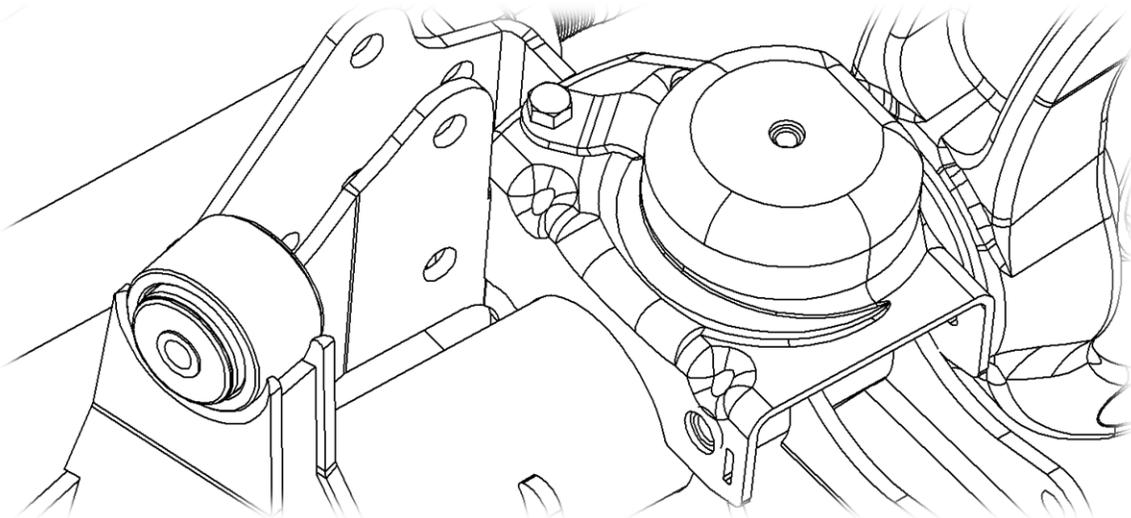
- The cast ductile iron center section is 12% lighter (70.9 lbs. vs 80.6 lbs.). A new design for optimal ground clearance and better packaging for maximum up travel have been achieved by casting in the upper control arm mount and moving the pinion bearing oil galley allowing for a 2.25" lower overall profile. Generous webbing stiffens the housing and minimizes gear deflection. The center section is drilled and tapped for an air locker fitting and uses standard Dana 60 bearings and seals. It is compatible with 9.75" Dana 60 gears or 10" Super 60 gears. Oversized ductile iron bearing caps retain the desired differential carrier.



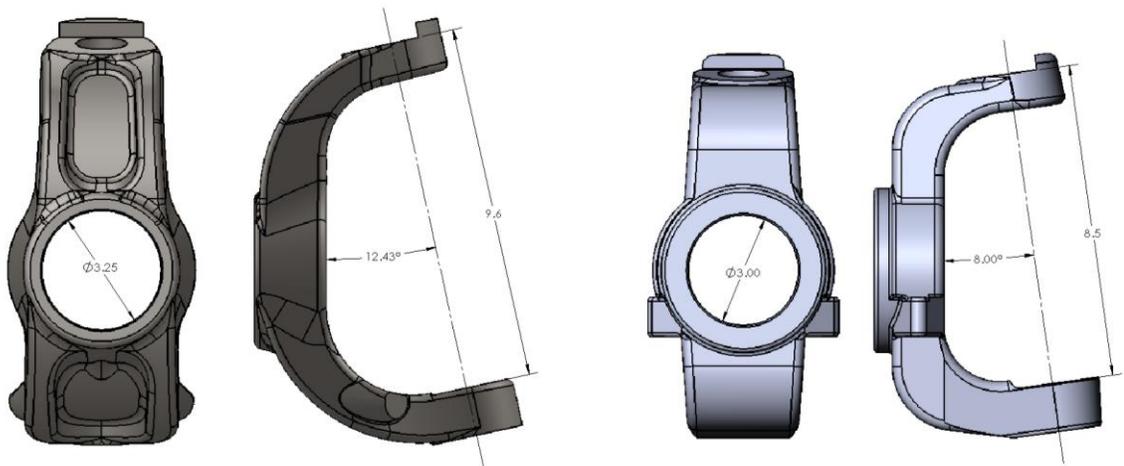
- A new ductile iron differential cover has been designed for maximum steering clearance and durability. The bottom section of the cover is nearly  $\frac{3}{4}$ " thick for ultimate durability when the trail gets rough. The cover features a built in "seal-breaker" to aid in cover removal for differential service.



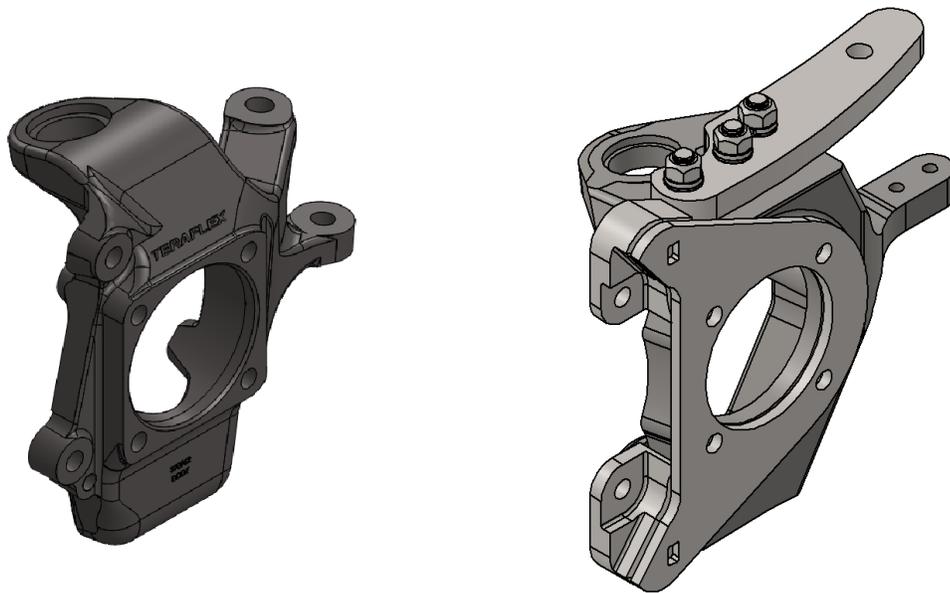
- The DOM (drawn over mandrel) tubing used in the axle housing has been increased from 3.00" diameter tube to 3.25" diameter. At the same time, the tube thickness has been reduced from 0.500" to 0.375". The axle tubing is approximately 14% lighter and 3% more resistant to bending when compared to the CRD60 front axle. Strength has been engineered into the axle using geometry rather than adding more material.
- Stamped spring perches replace the fabricated perches found on the CRD60 to eliminate spring bow. The stamped perches feature threaded inserts for bump stop extensions, limit strap mounting and coil spring retainers.



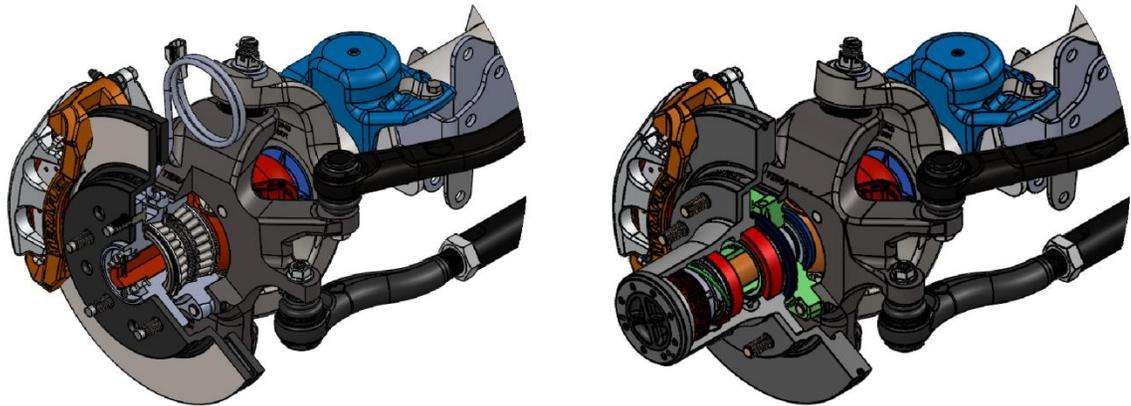
- The steering geometry has been updated to match the steering axis inclination (SAI) of the JK Wrangler. The increased SAI promotes directional stability and better return-to-center characteristics with less positive caster required. The ball joint spread on the new forged inner C is larger, thus increasing load carrying ability. Compatibility with standard Dana 60 ball joints was retained. The FEA optimized design increases the strength while reducing the weight by nearly 6% (16.1 lbs vs 17.1 lbs).



- The cast ductile iron outer knuckles feature a cast in “high steer” arm and brake caliper mount to reduce the number of components and the weight by more than 33% (21.4 lbs. vs 32 lbs.). Additionally, the tie rod arm has been raised slightly and both steering arms have been cast in at an angle relative to the SAI to account for the caster angle built into the axle. All Tera60 outer knuckles are machined to run a flipped drag link. The factory Jeep Ackerman geometry and steering arm lengths have been retained. The knuckles are mirrored right to left, providing the same benefits for both right hand drive and left hand drive applications.



- The standard live spindle unit bearing configuration option is retained for those desiring to retain a factory 5 on 5" or a larger 5 on 5.5" wheel bolt pattern. For ultimate durability and serviceability, a fixed chromoly spindle with serviceable tapered roller bearings and TeraFlex SlimLock locking hubs is an optional upgrade. The wheel bolt pattern changes to 8 on 6.5" with 9/16"-18 wheel studs. The chromoly spindle is drilled and tapped to accept the factory front wheel speed sensors and fully compatible with OEM ABS and stability programs. To protect the sensors from the elements, a V-seal is installed on the back of the wheel hub and prevents contamination from damaging the wheel speed sensor. This V-seal also acts as a second defense against contamination entering the wheel hub. OEM wheel speed sensors are swapped into the new Tera60 axle to reduce overall cost.



- Both the unit bearing and fixed spindle axles come with the TeraFlex Big Brake kit installed. The dual piston calipers paired with 13.3" rotors provide increased stopping power over the stock running gear. The calipers feature a zinc coating while the rotors have a zinc aluminum coating for superior corrosion resistance.
- Available in a standard 67" wide wheel mount to wheel mount width or wide 70" wheel mount to wheel mount width
- Profiled inner and outer 35 spline 4340 chromoly axle shafts with rolled splines to minimize fatigue and stress concentrations

The Tera60 shares many of the great features offered with the CRD60.

- All bearings and seals are standard, off-the-shelf parts available and at any auto parts warehouse.
- Hand built in the USA!
- Heavy duty ¼" thick brackets with multiple mounting holes for suspension adjustability
- Triple-stage powder coating process
- Profiled 35 spline 4340 chromoly axle shafts with 1480 series U-Joints and rolled splines to minimize fatigue and stress concentrations
- Genuine Dana-Spicer components where available (gear sets, ball joints, seals, bearings, U-Joints, pinion yoke)
- 1350 pinion yoke standard, 1310 optional
- 1 year unlimited mileage warranty against material defects and workmanship

A bolt on hydraulic steering assist axle bracket and tie rod clamp are available for purchase separately. These brackets and clamps are designed to work with PSC hydraulic assist kits. Mounting kit **1944755** is designed to work with PSC's older style silver coated hydraulic ram. Mounting kit **1944758** is designed to work with PSC's new nickel plated hydraulic ram. Because all the OEM steering geometry has been retained with the Tera60, it utilizes the same 6 ¾" stroke ram that a factory Dana 30 or Dana 44 uses.

## Rear CRD60

The CRD60 is available in a rear axle configuration only. In addition to the semi-float rear CRD60 that has been available, an extreme duty full float option is now available.

- 4140 chromoly spindles press fit and welded to upgraded 3.25" diameter 0.375" wall DOM axle tubes
- Oversized outer pinion bearing and removable seal holder
- Heavy duty ¼" thick brackets with multiple mounting holes for suspension adjustability
- Triple-stage powder coating process
- Retains OEM brake backing plates, park brake assembly and caliper
- New caliper mounting brackets to accommodate the massive 13.5" slotted rotors with zinc aluminum coating for superior corrosion resistance
- Profiled 35 spline 4140 chromoly axle shafts with rolled splines to minimize fatigue and stress concentrations
- Available in a standard 67" wide wheel mount to wheel mount width or wide 70" wheel mount to wheel mount width
- Genuine Dana-Spicer components where available (gear sets, seals, bearings, pinion yoke)
- 1350 pinion yoke standard, 1310 optional
- 1 year unlimited mileage warranty against material defects and workmanship

## Axle Installation

Installing a Tera60 front and CRD60 rear is a straight forward task that can be accomplished in the garage in a weekend. In addition to referencing a factory service manual, several things should be noted for axle installation.

**IMPORTANT NOTE!** All TeraFlex axle assemblies are shipped dry! All bearings and seals are pre-greased. Freight regulations dictate that the axles must be shipped dry. Use a quality 80W-90 gear oil to fill your new differentials.

As with any Jeep modification, it is important to verify function before driving the vehicle. After installing the axle, it is important to cycle the suspension to ensure the housing doesn't contact the frame or engine. All clearances should be checked at all the extremes the suspension will experience during full articulation and compression. Cycle the suspension with the axle fully installed, but without the springs and bump stops. Do not final tighten the track bar and control arm bolts at this time. The tires should be installed to verify fender clearance. The clearances need to be checked at the positions

outlined below.

1. **Full Compression**—raise the axle assembly slowly until there is component contact, ie:
  - the axle housing, control arms, track bar or drag link contact either the frame or the engine
  - the tires contact the fenders or other parts of the body
  - the track bar, bolt or frame bracket hits the diff cover or axle housing
2. **Full Droop**—lower the axle assembly slowly until any of the following occurs:
  - the brake lines or ABS wiring are taut
  - the driveshaft contacts the transmission cross member or exhaust on 2012 and newer (good to check on 2011 and older JKs)
  - driveshaft binding at pinion or transfer case
  - shocks at full extension
3. **Articulated Left and Right**—raise one side to full compression, droop the other side and vice versa (be sure to cycle the steering right and left at both extremes):
  - the tire contacts the fender/body, frame or bumper, the shock bottoms out, or the axle housing, track bar or drag link interfere with the frame

Record key measurements at each extreme. You will need to tune your bump stops, and limit straps (not required, but recommended) to prevent damage at the extremes of your suspension's range of travel.

When the axle is in the full compression position, measure the distance between the spring pad on the axle and the metal bump stop cup on the frame. Perform the same measurement when the axle is articulated as described in step three. This measurement will most likely be different. Choose the largest of the three measurements. This is the amount the front bump stops need to be extended. Don't forget to take tire clearance into account.

When the axle is drooped, it is important that the brake lines, park brake cables (rear axle only) or ABS wiring are not over extended. If the driveshaft contacts either the transmission cross member or exhaust, it is important to limit the down travel with either a limiting strap or installing a shorter shock. TeraFlex recommends installing a limiting strap to prevent damage to the shock from topping out. The spring perches on your new Tera60 feature a limit strap mounting point.

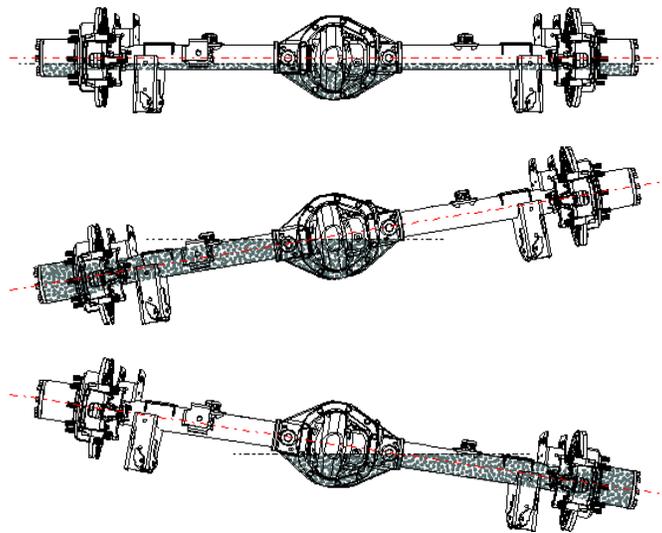
After clearances are verified, install the required bump stop extensions, limit straps and springs. With the Jeep on the ground at ride height torque the track bar and control arm bolts. The track bar, lower control arm and rear upper control arm bolts should be torqued to 125 ft-lbs (169 N-m) while the front upper control arm bolts should be torqued to 75 ft-lbs (102 N-m). Be sure to route the brake lines and ABS wiring so they will not be damaged as the suspension cycles and springs compress. Adjust the steering stop bolts to bottom out the same time the steering gear reaches the end of its travel, or before either tire contacts the frame, control arm or bumper (whichever happens first).

The principles outlined above are applicable in a rear axle installation. It is important to cycle the suspension and check for clearances at all suspension extremes to prevent damage to the Jeep.

## Differential Oil

Fill the differential with 80W-90 gear oil to the fill hole on a front Tera60. At this point, the front axle is ready to run; however, further steps must be taken when filling the rear axle to ensure long bearing life. The following steps are critical for the full float CRD60 rear and recommended for the semi-float axle. Begin by filling the CRD60 axle to the fill level indicator hole on the differential cover (small brass NPT plug).

After filling the rear differential it is necessary to flood the wheel hubs with oil for proper wheel bearing lubrication. Raise the right rear tire off the ground at least 6 inches. Wait one minute. Lower the right side down and top the differential off with more oil. Lift the left side of the differential and wait one minute before lowering. Again, top the differential off with more oil and install the fill and level indicator plugs.



Align the vehicle and double check the torque on all bolts before test driving. Re-torque all bolts after 100 miles and check torque every 3000 miles thereafter or after four wheeling.

## Drive Shafts

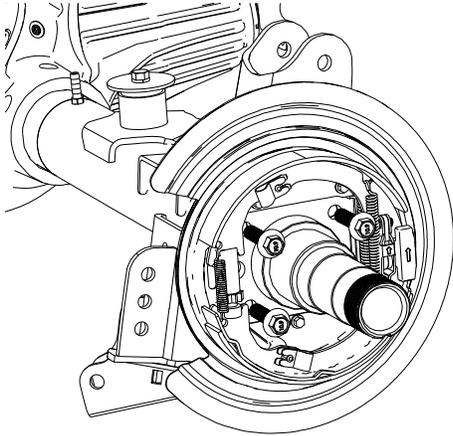
Drive shaft changes are required when installing a Tera60 front end or CRD60 rear end. The length change will vary depending on the pinion and transfer case yokes used (1310, 1330, 1350 or even between manufacturers) and the location of the axle under the Jeep. On average, the front and rear drive shafts will need to be shortened between 2 and 2 ½ inches. Refer to your drive shaft manufacturer's instructions to properly measure required drive shaft length. A 1350 pinion yoke comes standard on all Tera60 and CRD60 axles but can be upgraded to a 1310 yoke.

### Basic Front Axle Installation Checklist:

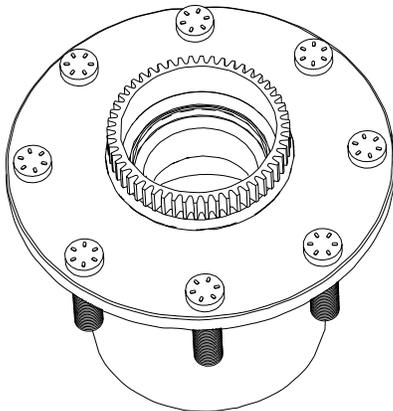
- Upper and lower control arms
- Track bar
- Sway bar links
  - Torque to 75 ft-lbs
- Tie rod
  - Torque to 63 ft-lbs
- Drag link
  - Torque pitman arm side to 77 ft-lbs
  - Torque axle side to 63 ft-lbs
- Shocks
  - Torque pin to 20 ft-lbs
  - Torque bolt to 56 ft-lbs
- Wheel speed sensors
- Brake lines – don't forget the copper washers on either side of the banjo fitting
  - Torque banjo bolt to 23 ft-lbs
- Bleed brakes
- Tires and wheels
  - Torque lug nuts to 135 ft-lbs for 8 lug
  - Torque lug nuts to 92-132 ft-lbs for 5 lug unit bearing
- Cycle suspension to check clearances and measure for bump stops and limit straps
- Bump stops/extensions and limit straps
- Springs and spring retainers
- Torque control arm bolts on the ground
  - Lower control arms to 125 ft-lbs
  - Upper control arms to 75 ft-lbs
- Torque track bar bolts on the ground to 125 ft-lbs
- Set steering stops
- Fill with 80W-90 oil
- Wheel alignment
- Measure for drive shaft

### Basic Rear Axle Installation Checklist:

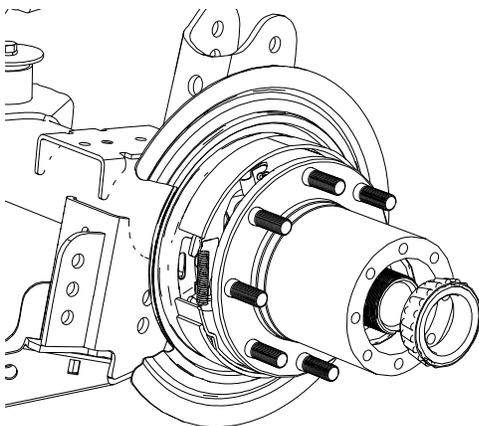
- OEM park brake backing plate and mechanism
  - Torque bolts to 45 ft-lbs



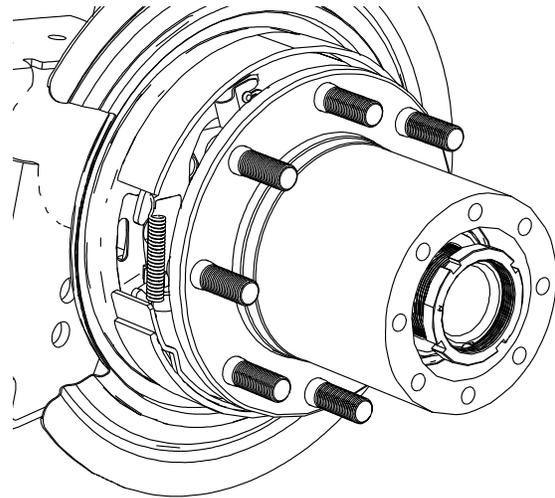
- Grease wheel hub seals



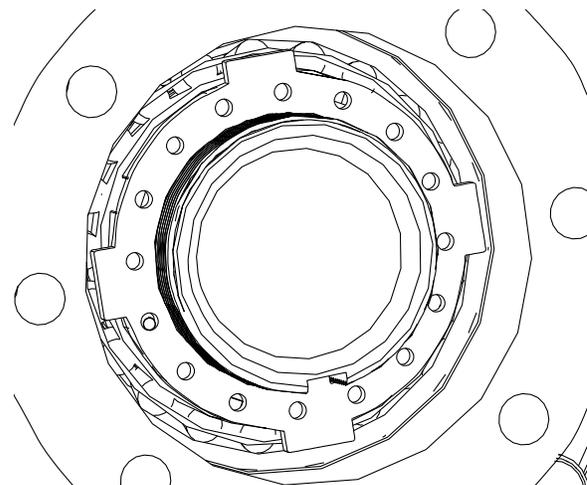
- Wheel hub and outer bearing



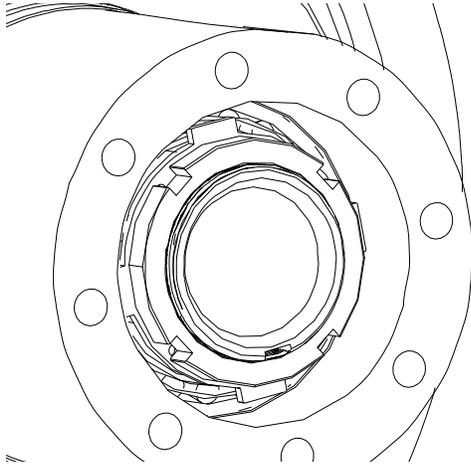
- Inner spindle nut (with pin)
  - Torque to 50 ft-lbs while rotating hub, then back the nut off ¼ turn, *final adjust* as necessary to align pin with hole in lock washer by slowly tightening until the pin indexes in the lock washer. *Note: the lock washer can be flipped over and reinstalled for alternate indexing.*



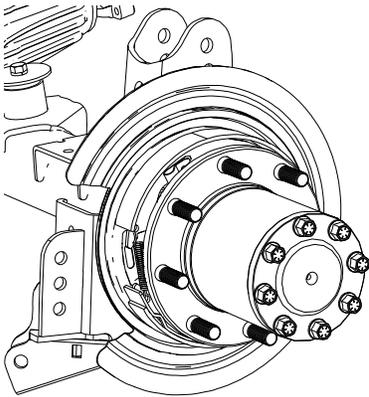
- Lock washer



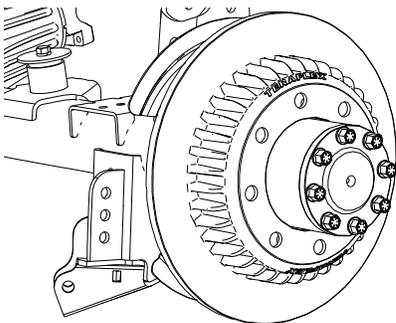
- Outer spindle nut
  - Torque to 160-205 ft-lbs



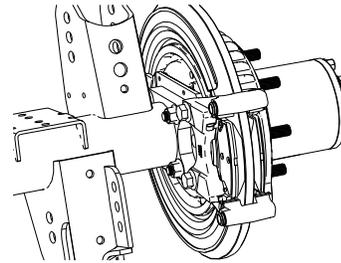
- Apply silicone to hub face, install axle shaft
  - Torque  $7/16$ " bolts in crisscross pattern to 95 ft-lbs



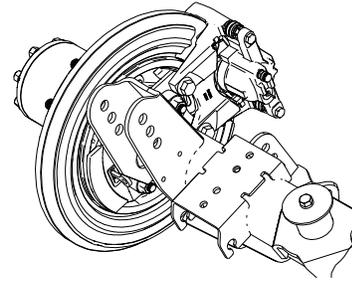
- Brake rotor



- Caliper mounting bracket, brake pads, caliper
- Apply thread locking compound and torque caliper mounting bracket bolts to 55 ft-lbs

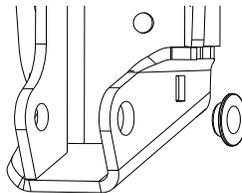


- Torque caliper bolts to 26 ft-lbs
- Upper and lower control arms



- Track bar
- Sway bar links
  - Torque to 75 ft-lbs
- Shocks
  - Torque bar pin bolts to 37 ft-lbs
  - Torque bolt to 56 ft-lbs

*Note: Hole Reducer is provided for installing Non-Falcon Shocks*



- Wheel speed sensors
- Park brake cables
- Tires and wheels
  - Torque lug nuts to 135 ft-lbs for 8 lug full float, 92-132 for 5 lug

- Cycle suspension to check clearances and measure for bump stops and limit straps
- Bump stops/extensions and limit straps
- Springs and spring retainers
- Torque upper and lower control arm bolts on the ground to 125 ft-lbs
- Torque track bar bolts on the ground to 125 ft-lbs
- Fill with 80W-90 Oil
- Wheel alignment
- Measure for drive shaft

## **Initial Break In and Maintenance**

### **Break In**

New gear sets and bearings need time to break in. Proper gear break in procedures should be followed to help ensure years of quiet, trouble free operation.

Do not go over 60 mph for the first 100 miles or so. After the first 20 miles, stop and let the differential cool before driving again. This cycle should be repeated a few times. Avoid towing or heavy use for the first 500 miles. When towing a heavy load for the first time, the same 20 mile drive/cool cycle should be followed. Change the oil after 500 miles to remove any metal particles from the initial break in. This is an excellent time to inspect the gear set to catch any potential problems early on.

### **Maintenance**

Wash the axle with a mild car wash detergent to maintain the powder coat finish.

Maintenance parts are available from TeraFlex, any TeraFlex dealers or many major auto parts warehouses. The tables below contain the list of standard parts used in TeraFlex Tera60 and CRD60 axles.

## Tera60 Front Axle Standard Parts

Description	TeraFlex Part Number	Spicer Part Number	Parts Warehouse Number
Pinion Seal	14748	9316	9316
Pinion Nut	8581	30271	-
Pinion Nut Washer	30275	30275	30275
Outer Pinion Bearing Cup	600436	706045X (cup and cone)	HM88510
Outer Pinion Bearing Cone	600437		HM88542
Inner Pinion Bearing Cup	600434	706046X (cup and cone)	HM803110
Inner Pinion Bearing Cone	600435		HM803146
Carrier Bearing Cup	397073	706047X (cup and cone, 2 ea.)	382S
Carrier Bearing Cone	397074		387A
1480 Series Axle U Joint	58061	SPL55-3X	SPL55-3X
Inner Axle Seal	36487	36487	470682
Spindle Bearing and Seal Kit*	3070014	700014	SBK-3
↳ Spindle Needle Roller Bearing*	620063	620063	B2414
↳ Outer Axle Shaft Seal (Needle Bearing)*	620062	620062	710044
↳ Outer Axle Shaft Seal (Spindle)*	37311	37311	710045
↳ Stub Shaft Thrust Spacer (Plastic)*	620060	37312	-
Inner Wheel Bearing*	601449	-	-
↳ Inner Wheel Bearing Cup*	600449	-	JLM506810
↳ Inner Wheel Bearing Cone*	600450	-	JLM506849A
Outer Wheel Bearing*	601455	-	SET38
↳ Outer Wheel Bearing Cup*	600455	-	LM104911
↳ Outer Wheel Bearing Cone*	600457	-	LM104949
Inner Spindle Nut*	8373	660568	-
Spindle Lock Washer*	8371	621028	-
Outer Spindle Nut*	8372	621027	-
Wheel Hub Seal*	2000005	-	415458
9/16-18 Wheel Stud (8 Lug)*	610218	-	610-218
1/2-20 Wheel Stud (5 Lug)^	610379	-	610-379
Brake Pads	4303430	-	05143350AC
Upper Control Arm Bushing	12842	-	52060138AA

\* Parts apply only to Fixed Spindle Axle

^ Parts apply only to Unit Bearing Axle

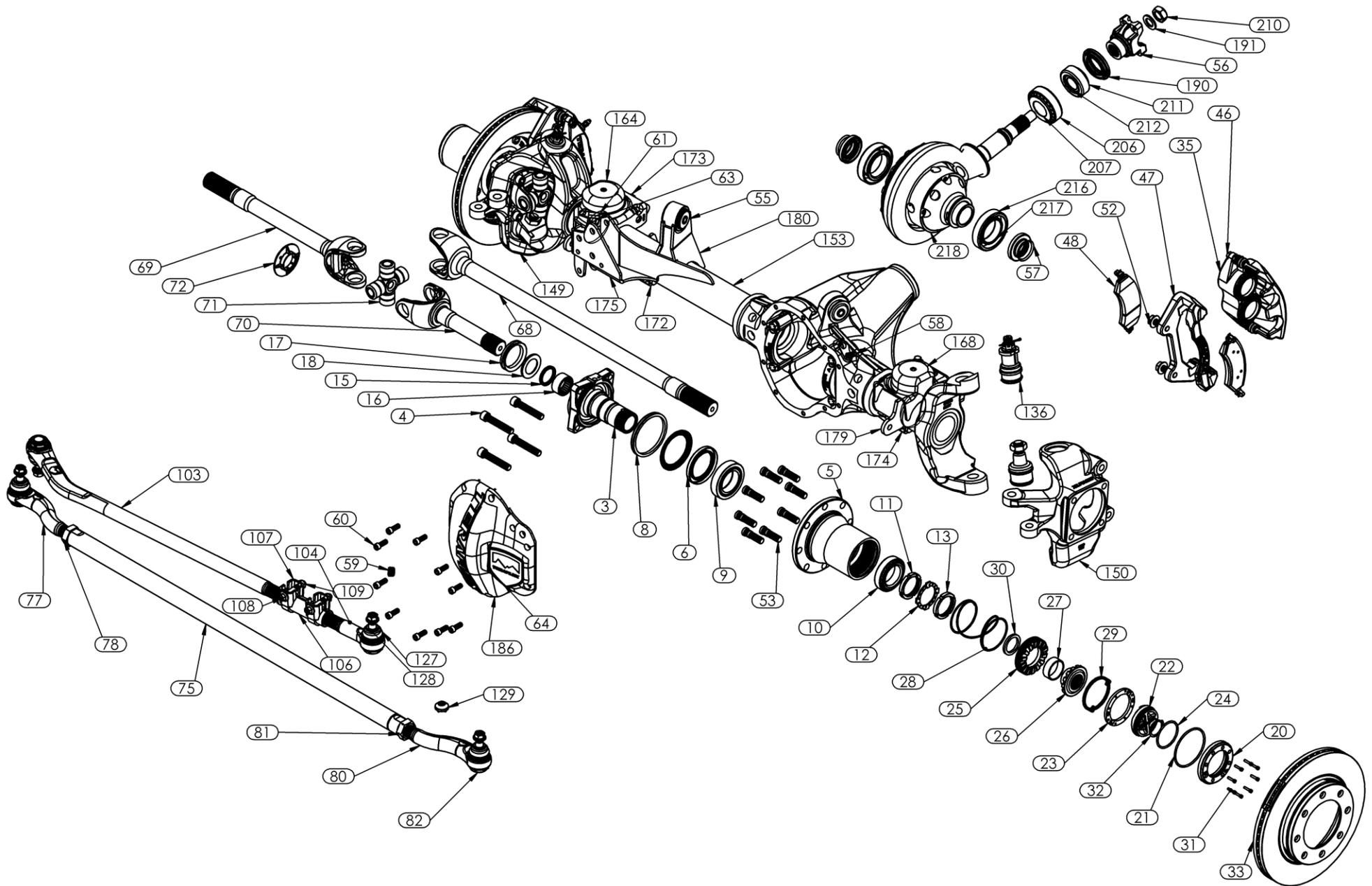
## CRD60 Rear Axle Standard Parts

Description	TeraFlex Part Number	Spicer Part Number	Parts Warehouse Number
Pinion Seal	14748	9316	9316
Pinion Nut	8581	30271	-
Pinion Nut Washer	30275	30275	30275
Outer Pinion Bearing Cup	3003420	-	3420
Outer Pinion Bearing Cone	3003476	-	3476
Inner Pinion Bearing Cup	600434	706046X (cup and cone)	HM803110
Inner Pinion Bearing Cone	600435		HM803146
Carrier Bearing Cup	397073	706047X (cup and cone, 2 ea.)	382S
Carrier Bearing Cone	397074		387A
Spindle Bearing and Seal Kit <sup>&amp;</sup>	3070014	700014	SBK-3
L> Spindle Needle Roller Bearing <sup>&amp;</sup>	620063	620063	B2414
L> Outer Axle Shaft Seal (Needle Bearing) <sup>&amp;</sup>	620062	620062	710044
L> Outer Axle Shaft Seal (Spindle) <sup>&amp;</sup>	37311	37311	710045
L> Stub Shaft Thrust Spacer (Plastic) <sup>&amp;</sup>	620060	37312	-
Inner Wheel Bearing <sup>&amp;</sup>	601449	-	-
L> Inner Wheel Bearing Cup <sup>&amp;</sup>	600449	-	JLM506810
L> Inner Wheel Bearing Cone <sup>&amp;</sup>	600450	-	JLM506849A
Outer Wheel Bearing <sup>&amp;</sup>	601455	-	SET38
L> Outer Wheel Bearing Cup <sup>&amp;</sup>	600455	-	LM104911
L> Outer Wheel Bearing Cone <sup>&amp;</sup>	600457	-	LM104949
Inner Spindle Nut <sup>&amp;</sup>	8373	660568	-
Spindle Lock Washer <sup>&amp;</sup>	8371	621028	-
Outer Spindle Nut <sup>&amp;</sup>	8372	621027	-
Wheel Hub Seal <sup>&amp;</sup>	2000005	-	415458
Wheel Bearing and Seal (Semi-Float Shaft) <sup>#</sup>	3000620	-	SET20
Wheel Speed Sensor Tone Ring <sup>#</sup>	2004403	2004403	-
9/16-18 Wheel Stud (8 Lug) <sup>&amp;</sup>	610218	-	610-218
1/2-20 Wheel Stud (5 Lug) <sup>#</sup>	610379	-	610-379

<sup>&</sup> Parts apply only to Full Float Axle

<sup>#</sup> Parts apply only to Semi-Float Axle

# Fixed Spindle Front Tera60 Exploded View



Fixed Spindle Front Tera60 BOM

Call Out	Part Number	Description
3	300848	Full Float Axle Spindle Front with ABS for JK CRD60
4	550	Bolt M14-1.5 x 80mm Long Grade 12.9 Cap Screw
5	3000865	Full Float Front Hub with 8 on 6.5" Bolt Pattern
6	2000005	TJ/YJ Full Float Hub Seal 8365
7	200450	TONE RING, 52 TEETH, JK FULL FLOAT
8	800950	JK Full Float Hub Seal to Protect Speed Sensor
9	601449	Bearing Cup and Cone CRD60 Full Float Inner
10	601455	Bearing SET38 CRD60 Full Float Outer
11	8373	Nut Spindle Dana 60 Inner
12	8371	Washer Front Axle Spicer #621028
13	8372	Nut Spindle Dana 60 Outer
14	3070014	Spindle Bearing and Seal Kit D60 AXL700014 WCD
15	620062	NEEDLE BEARING SEAL FOR FULL FLOAT STUB SHAFTS
16	620063	NEEDLE ROLLER BEARING, DRAWN CUP WITH OPEN ENDS
17	37311	Inner Spindle Seal for Full Float Axle Shafts
18	620060	Thrust Washer for Inner Spindle bearing on Full Float Axle Shafts
19	449350	Slimloc Locking Hub for 35 Splined Shafts
20	449339	Locking Hub, Bezel
21	449343	Locking Hub, Hub O-Ring HydraPak AS-568A-239
22	449337	Locking Hub, Dial
23	449341	Locking Hub, Bolt Ring
24	449340	Locking Hub, Dial O-Ring HydraPak AS-568A-229
25	449345	Locking Hub, Outer Spline (Engages hub)
26	449346	Locking Hub, Inner Spline (Engages Axle shaft)
27	449347	Locking Hub, Bushing
28	449349	Locking Hub, Spring
29	449344	Locking Hub, Disengagement Ring
30	449348	Locking Hub, Spacer
31	832	Bolt #8-32 UNC x .75" Long Black Socket Head Gr. 5
32	844	Snap Ring External for 1.5" Shaft used on Full Float Stub Shaft
33	4303408	JK Front PLAIN 13.3" Big Brake Rotor 8 on 6.5
35	4303415	Big Brake RAW Caliper JK Front Single Caliper 56mm Dia Pistons NO bracket
46	164	Bolt M8 x 1.25 P x 20mm Long Flanged Hex Head Zinc Plated Grade 10.9
47	4303406	JK Front Big Brake Anchor Bracket
48	4303430	JK Front Big Brake Pads & Clips
52	551	Bolt M14-1.5 x 40mm Long Grade 10.9 Flanged Hex Head
53	610218	Wheel Stud 9/16"-18 x 2" Long
55	12842	Bushing JK Front Upper Axle End FlexArm Bushing with 12mm Hole 52060138
56	1350	Pinion Yoke for 1350 U-bolt style U-Joint
57	36487	Axle Seal CRD60 Inner Axle Shaft
58	600011	Vent 5/16" NPT x 1/8" Hose Male Brass Barbed Breather
59	6151	Plug 1/2" NPT Zinc Plated for HD Diff Covers
60	414	3/8"-16 x1" Socket Head Cap Screw
61	951300	JK Front Lower Coil Spring Retainer Bracket
63	98	Bolt 3/8"-16 x 1" UNC Long Hex Head Zinc Plated

Call Out	Part Number	Description
64	797	Teraflex TF60 Diff Cover Icon Badge
68	300634 (300635)	Tera60 Front Passenger Side Axle Shaft with 35 Spline 34.97" Long (+1.5" Wide in Parentheses)
69	300618 (300619)	Tera60 Front Driver Side Axle Shaft with 35 Spline 18.875" Long (+1.5" Wide in Parentheses)
70	300610	Tera60 Front Axle Stub Shaft with 35 Spline for Full Float Kit 10.43" Long
71	58061	U-Joint Front T60 1480 Series Spicer # SPL55-3X WCD 5-806X
72	350607	Axle Dust Shield for 3.25" Axle Tubes CRD 60
75	853913	JK HD Threaded 4140 Chromoly Tie Rod Tube
77	853912	JK HD Tie Rod RH Threaded Forging
78	97062	Nut M30 X 1.5 RH Jam Nut
80	853911	JK HD Tie Rod LH Threaded Forging
81	97061	Nut M30 X 1.5 LH Jam Nut
82	344410	Premium JK Steering Ball Joint
103	853921	JK HD Long Drag Link Forging
104	853922	JK HD Short Drag Link Forging
106	753411	Threaded Sleeve with LH and RH Threads for Adjustable Trackbars
107	753412	Pinch Clamp For JK Trackbar Adjusting Sleeves Without Hardware
108	203	Bolt M12 x 1.75P x 70mm Long Partially Threaded Grade 10.9 Flanged Hex Head
109	204	Nut M12 x1.75P Serrated Flanged Distorted Thread Lock Nut
127	344405	Premium JK Steering Ball Joint Bi-Fold Dust Boot
128	344406	Premium JK Steering Ball Joint Dust Boot Retaining Ring
129	344000	HD Ball Joint Adjusting Tool
136	3700238	Ball Joint Set for Dana 60 Knuckles
149	390962	Outer Right Knuckle for CRD 60 Axles (12.43 degree SAI)
150	390963	Outer Left Knuckle for CRD 60 Axles (12.5 degree SAI)
153	360601	JK Front CRD60 Axle 3.25" Housing with Tubes, Inner Knuckles, Brackets Powder Coated
164	990870	JK Front CRD60 Passenger Side Spring Pad
168	990880	JK Front CRD60 Driver Side Spring Pad
172	944792	Bracket JK Front Lower Passenger Side Flex Arm Mount for 3.25" Axle Tubes
173	944720	JK Front Axle Driver/Passenger Shock Bracket for 3.25" Axle Tubes
174	990890	Bracket JK CRD60 Front Lower Driver Side Flex Arm Mount for 3.25" Axle Tubes
175	944764	JK Front Trackbar Bracket with Multiple Holes for 3.25" Axle Tubes
179	944730	JK Front Swaybar Bracket 3.25" Tubes L&R x2 on Axle
180	945750	JK Front Tera60 Upper Passenger Side Flex Arm Bracket for 3.25" Tube
186	602211	TF60 HD Differential Cover
190	14748	CRD60 Outer Pinion Seal
191	30275	Pinion Nut Washer CRD60/Dana 60 #30275
206	600434	Inner Pinion Bearing Cup CRD60/Dana 60 #HM803110
207	600435	Inner Pinion Bearing Cone CRD60/Dana 60 #HM803146
210	8581	Pinion Nut
211	600436	Bearing T60R Pinion HM88510
212	600437	Bearing T60R Pinion HM88542
216	397073	Carrier Bearing Cup CRD60/Dana 60 #3825
217	397074	Carrier Bearing Cone CRD60/Dana 60 #387A
218	16048	Dana 60 ARB Air Locker

## Unit Bearing Front Tera60 Exploded View

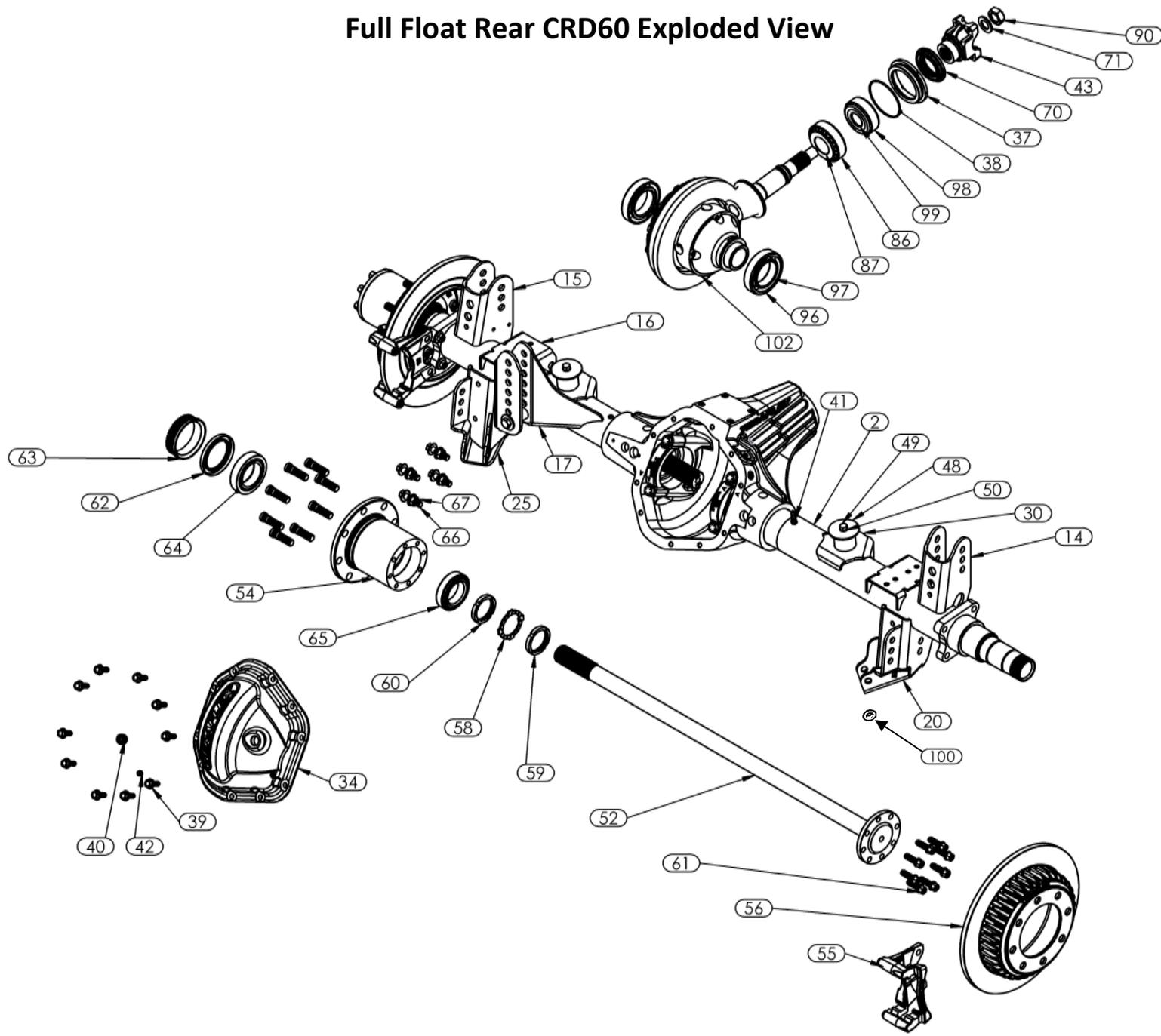


## Unit Bearing Front Tera60 BOM

Call Out	Part Number	Description
3	3971200	JK Front Unit Bearing with Sensor for 5 on 5" & 5 on 5.5" Bolt Patterns
6	610379	Wheel Stud 1/2"-20 UNF x 1.9375" Long
7	2034	O-Ring 8mm I.D. 1mm Cross Section and 10mm O.D. for Speed Sensor Plug
8	550	Bolt M14-1.5 x 80mm Long Grade 12.9 Cap Screw
9	4303410	JK Front PLAIN 13.3" Big Brake Rotor
11	4303415	Big Brake RAW Caliper JK Front Single Caliper 56mm Dia. Pistons NO bracket
23	4303406	JK Front Big Brake Anchor Bracket
24	551	Bolt M14-1.5 x 40mm Long Grade 10.9 Flanged Hex Head
25	4303430	JK Front Big Brake Pads & Clips
30	12842	Bushing JK Front Upper Axle End FlexArm Bushing with 12mm Hole
31	1310	Yoke
32	36487	Axle Seal CRD60 Inner Axle Shaft
33	600011	Vent 5/16" NPT x 1/8" Hose Male Brass Barbed Breather
34	6151	Plug 1/2" NPT Zinc Plated for HD Diff Covers
35	414	3/8"-16 x 1" Socket Head Cap Screw
36	951300	JK Front Lower Coil Spring Retainer Bracket
38	98	Bolt 3/8"-16 x 1" UNC Long Hex Head Zinc Plated
39	797	Teraflex TF60 Diff Cover Icon Badge
43	300634	Tera60 Front Passenger Side Axle Shaft with 35 Spline 34.97" Long
44	300618	Tera60 Front Driver Side Axle Shaft with 35 Spline 18.875" Long
45	300606	Axle Shaft Tera60 Front 35 Spline Unit Bearing Stub Shaft 6.76" Long
46	46085	Nut 1-1/8"-18 UNEF Slotted For Cotter Pin, Front Axles
47	460851	Cotter Pin, Front Axles for Nut#46085
48	4746811	Washer Front Axle
49	58061	U-Joint Front T60 1480 Series Spicer # SPL55-3X WCD 5-806X
50	350607	Axle Dust Shield for 3.25" Axle Tubes CRD 60
53	853913	JK HD Threaded 4140 Chromoly Tie Rod Tube
55	853912	JK HD Tie Rod RH Threaded Forging
56	97062	Nut M30 X 1.5 RH Jam Nut
58	853911	JK HD Tie Rod LH Threaded Forging
59	97061	Nut M30 X 1.5 LH Jam Nut
60	344410	Premium JK Steering Ball Joint

Call Out	Part Number	Description
81	853921	JK HD Long Drag Link Forging
82	853922	JK HD Short Drag Link Forging
84	753411	Threaded Sleeve with LH and RH Threads for Adjustable Trackbars
85	753412	Pinch Clamp For JK Trackbar Adjusting Sleeves Without Hardware
86	203	Bolt M12 x 1.75P x 70mm Long Partially Threaded Grade 10.9 Flanged Hex Head
87	204	Nut M12 x1.75P Serrated Flanged Distorted Thread Lock Nut
105	344405	Premium JK Steering Ball Joint Bi-Fold Dust Boot
106	344406	Premium JK Steering Ball Joint Dust Boot Retaining Ring
107	344000	HD Ball Joint Adjusting Tool
114	3700238	Ball Joint Set for Dana 60 Knuckles
127	390962	Outer Right Knuckle for CRD 60 Axles (12.43 degree SAI)
128	390963	Outer Left Knuckle for CRD 60 Axles (12.43 degree SAI)
131	360601	JK Front CRD60 Axle 3.25" Housing with Tubes, Inner Knuckles, Brackets Powder Coated
142	990870	JK Front CRD60 Passenger Side Spring Pad
146	990880	JK Front CRD60 Driver Side Spring Pad
150	944792	Bracket JK Front Lower Passenger Side Flex Arm Mount for 3.25" Axle Tubes
151	944720	JK Front Axle Driver/Passenger Shock Bracket for 3.25" Axle Tubes
152	990890	Bracket JK CRD60 Front Lower Driver Side Flex Arm Mount for 3.25" Axle Tubes
153	944764	JK Front Trackbar Bracket with Multiple Holes for 3.25" Axle Tubes
157	944730	JK Front Swaybar Bracket 3.25" Tubes L&R x2 on Axle
158	945750	JK Front Tera60 Upper Passenger Side Flex Arm Bracket for 3.25" Tube
164	602211	TF60 HD Differential Cover
168	14748	CRD60 Outer Pinion Seal
169	30275	Pinion Nut Washer CRD60/Dana 60 #30275
184	600434	Inner Pinion Bearing Cup CRD60/Dana 60 #HM803110
185	600435	Inner Pinion Bearing Cone CRD60/Dana 60 #HM803146
188	8581	Pinion Nut
189	600436	Bearing T60R Pinion HM88510
190	600437	Bearing T60R Pinion HM88542
194	397073	Carrier Bearing Cup CRD60/Dana 60 #382S
195	397074	Carrier Bearing Cone CRD60/Dana 60 #387A
196	16048	Dana 60 ARB Air Locker

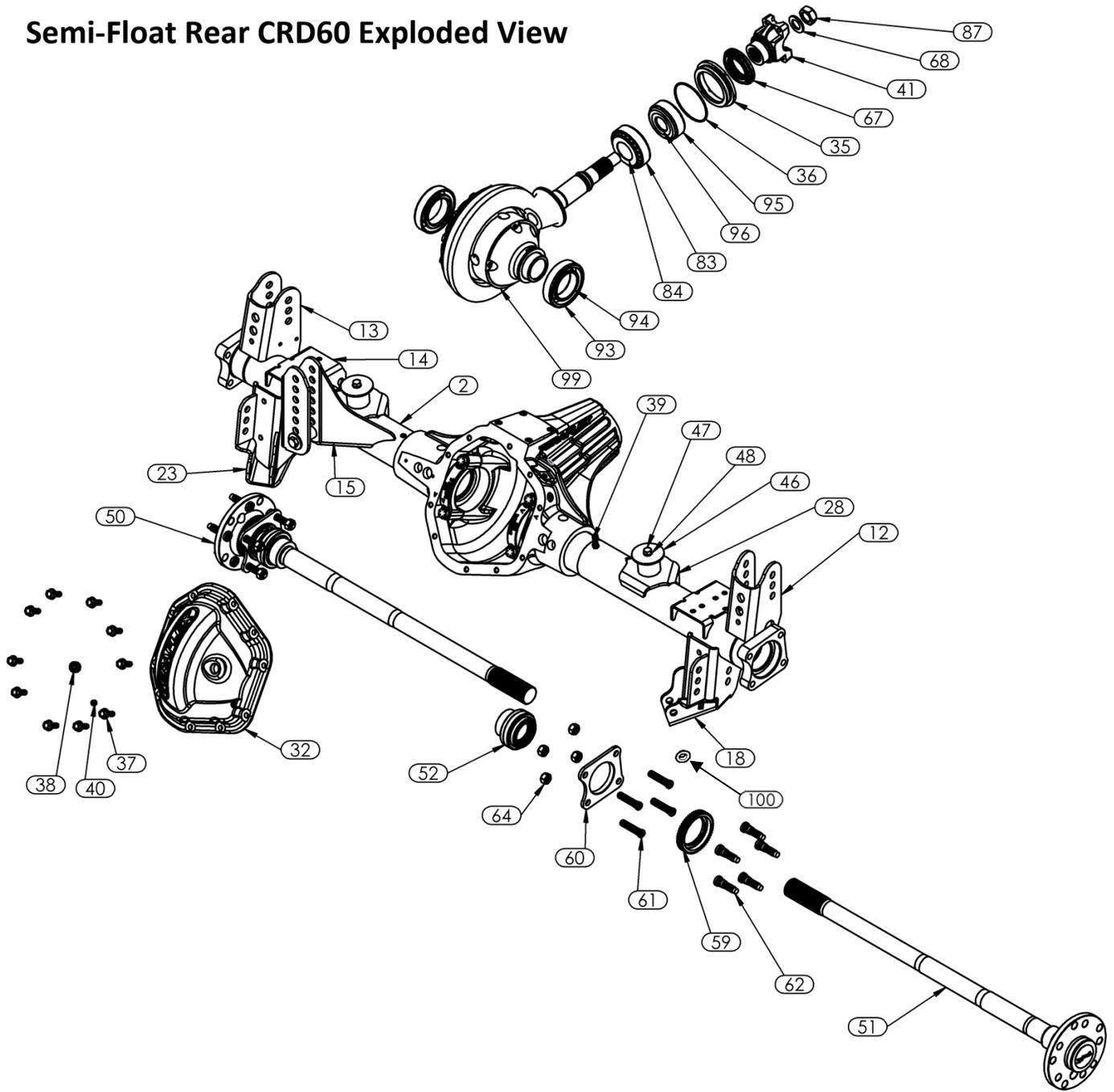
# Full Float Rear CRD60 Exploded View



## Full Float Rear CRD60 BOM

Call Out	Part Number	Description
2	347001	JK Rear CRD60 Axle Housing with 3.25" Tubes, Spindles, Brake Flanges, Brackets, Powder Coated
14	3991050	JK CRD60 Rear Upper Passenger Side FlexArm Mount 3.25" Tube
15	3991051	JK CRD60 Rear Upper Driver Side FlexArm Mount 3.25" Tube
16	3991060	JK Rear CRD60 Bumpstop Pad 3.25" Tube
17	3991080	JK Rear CRD60 Trackbar Mount 3.25" Tube
20	3991090	JK Rear Axle Passenger Lower Control Arm Bracket 3.25" Tube
25	3991091	JK Rear Axle Driver Lower Control Arm Bracket 3.25" Tube
30	3991070	JK Rear CRD60 Coil Spring Pad 3.25" Tube
34	602111	HD Cover for CRD60 Differential
37	604111	Seal Holder 60CRD 00060-4CRD
38	108	CRD60 Axle O-Ring
39	808	Bolt 3/8"-16 UNC x 1" Flanged Serrated Head Zinc Plated
40	6151	Plug 1/2" NPT Zinc Plated for HD Diff Covers
41	600011	Vent 5/16" NPT x 1/8" Hose Male Brass Barbed Breather
42	610001	Plug 1/8" NPT Allen Head Plug
43	1310	Yoke
48	600270	Bracket Spring Retainer RAW JK, Rear Lower Spring
49	98	Bolt 3/8"-16 x 1" UNC Long Hex Head Zinc Plated
50	123	Lock Washer 3/8" Zinc Plated
52	999238	Axle Shaft 35 Spline Full Float
54	3000866	Full Float Rear Hub with 8 X 6.5" Bolt Pattern
55	304504	Rear Anchor Bracket, Big Rotor Kit JK W/Factory Caliper
56	4304408	JK Rear PLAIN 13.5" Big Brake Rotor 8 on 6.5
57	610218	Wheel Stud 9/16"-18 x 2" Long
58	8371	Washer Front Axle Spicer #621028
59	8372	Nut Spindle Dana 60 Outer
60	8373	Nut Spindle Dana 60 Inner
61	1124	Bolt 7/16"-14 UNC x 1.375" Long Flange Hex For Full Float Rear Axles
62	2000005	TJ/YJ Full Float Hub Seal 836S
63	204450	JK Full Float Hub Tone Ring 52 Teeth Rear
64	601449	Bearing Cup and Cone CRD60 Full Float Inner
65	601455	Bearing SET38 CRD60 Full Float Outer
66	409	Bolt M12 x 1.75P x 45mm Long Gr10.9 Flanged Hex Head
67	204	Nut M12 x1.75P Serrated Flanged Distorted Thread Lock Nut
70	14748	CRD60 Outer Pinion Seal
71	30275	Pinion Nut Washer CRD60/Dana 60 #30275
86	600434	Inner Pinion Bearing Cup CRD60/Dana 60 #HM803110
87	600435	Inner Pinion Bearing Cone CRD60/Dana 60 #HM803146
90	8581	Pinion Nut
96	397073	Carrier Bearing Cup CRD60/Dana 60 #3825
97	397074	Carrier Bearing Cone CRD60/Dana 60 #387A
98	3003420	Outer Pinion Bearing Cup CRD60 #3420
99	3003476	Outer Pinion Bearing Cone Assembly CRD60 #3476
100	399097	JK Rear Axle, Control Arm Bracket, Hole Reducer, Non Falcon Shocks
102	16048	Dana 60 ARB Air Locker

# Semi-Float Rear CRD60 Exploded View



## Semi-Float Rear CRD60 BOM

Call Out	Part Number	Description
2	3350501	JK Rear CRD60 Axle Housing with Tubes, Flanges, Brackets, HD Cover, Powder Coat
12	3991050	JK CRD60 Rear Upper Passenger Side FlexArm Mount 3.25" Tube
13	3991051	JK CRD60 Rear Upper Driver Side FlexArm Mount 3.25" Tube
14	3991060	JK Rear CRD60 Bumpstop Pad 3.25" Tube
15	3991080	JK Rear CRD60 Trackbar Mount 3.25" Tube
18	3991090	JK Rear Axle Passenger Lower Control Arm Bracket 3.25" Tube
23	3991091	JK Rear Axle Driver Lower Control Arm Bracket 3.25" Tube
28	3991070	JK Rear CRD60 Coil Spring Pad 3.25" Tube
32	602111	HD Cover for CRD60 Differential
35	604111	Seal Holder 60CRD 00060-4CRD
36	108	CRD60 Axle O-Ring
37	808	Bolt 3/8"-16 UNC x 1" Flanged Serrated Head Zinc Plated
38	6151	Plug 1/2" NPT Zinc Plated for HD Diff Covers
39	600011	Vent 5/16" NPT x 1/8" Hose Male Brass Barbed Breather
40	610001	Plug 1/8" NPT Allen Head Plug
41	1350	Pinion Yoke for 1350 U-bolt style U-Joint
46	600270	Bracket Spring Retainer RAW JK, Rear Lower Spring
47	98	Bolt 3/8"-16 x 1" UNC Long Hex Head Zinc Plated
48	123	Lock Washer 3/8" Zinc Plated
50	3999232	JK Rear Axle Shaft Assembly with bearing and retainer 32in Long
51	999232	Axle Shaft D60 JK Rear Standard Length Both Sides 32" Long 5 on 5" and 5 on 5.5" Bolt Patterns
52	3000620	Set 20 Bearing Kit for CRD60 Rear Wheel Bearings
59	2004403	JK Rear Axle Shaft Tone Ring 52 Teeth
60	3990040	JK Rear Axle Bearing Retainer for Semi Float CRD60 Axles
61	610323	Wheel Stud M12 x 1.5 x 54mm Long
62	610379	Wheel Stud 1/2"-20 UNF x 1.9375" Long JK Rear Axle
64	168	Nut M12 x 1.5 P Stover Lock Zinc Plated
67	14748	CRD60 Outer Pinion Seal
68	30275	Pinion Nut Washer CRD60/Dana 60 #30275
83	600434	Inner Pinion Bearing Cup CRD60/Dana 60 #HM803110
84	600435	Inner Pinion Bearing Cone CRD60/Dana 60 #HM803146
87	8581	Pinion Nut
93	397073	Carrier Bearing Cup CRD60/Dana 60 #3825
94	397074	Carrier Bearing Cone CRD60/Dana 60 #387A
95	3003420	Outer Pinion Bearing Cup CRD60 #3420
96	3003476	Outer Pinion Bearing Cone Assembly CRD60 #3476
99	16048	Dana 60 ARB Air Locker
100	399097	JK Rear Axle, Control Arm Bracket, Hole Reducer, Non Falcon Shocks