

FREE SPINNIN'

Dynatrac's Hub & Bearing Kit Lightens the Load

Dodge 2500 & 3500 4x4 Trucks aren't equipped with manual front hubs. This means that even in two wheel drive, when the front wheels are turning, they're driving the front differential and driveshaft. This can burn horsepower and fuel as well as create extra wear on the components.

Dynatrac's Free Spin Kit provides a simple solution to this issue. The kit consists of new front 35 spline outer axle shafts, Heavy-Duty spindles, wheel hubs, bearings, seals and a pair of manual locking hubs. The new bearing/spindle setup is strong, serviceable, and not prone to failure like the factory unit type hub and bearing assembly. When the bearings need replacement, they are also much cheaper than the unit bearing assembly. With the kit in place, you simply unlock the hubs to disengage the front axle until you need it.

The system is a complete bolt-on, but in our case, required some specialized tools like a press and ball joint tool since we also installed a set of Dynatrac's "Pro Steer" rebuild able ball joints. Make sure you have everything you need before disassembling your vehicle. Otherwise, take your rig to a shop to have the kit installed. Dynatrac manufactures Free Spin kits for 1994-2008 Dodge 2500 & 3500 4x4 Trucks and 1999-2008 Ford F-250/350/450/550 4x4 Trucks & Excursions.

Hub Kit Installation:

1) Raise front of vehicle and support with stands. Remove front wheels (photo 1).



Photo 1

2) Un-bolt brake caliper from knuckle and hang to prevent damaging ABS or brake lines (photo 2).



Photo 2

3) Remove rotor. Remove allen bolt attaching ABS sensor to hub assembly (photo 3).



Photo 3

4) Remove axle retaining nut @ hub (photo 4).



Photo 4

5) Remove 4 bolts attaching hub/bearing assembly to knuckle (photo 5).



Photo 5

6) Drain differential to prevent gear oil from entering axle tube when the axle shaft is removed (photo 6). If you don't want to remove the differential cover, you can also avoid spillage by raising the side of the axle you're working on to keep the gear oil on the opposite side (photo 6).



Photo 6

7) Remove bearing assembly and dust shield. Slide axle shaft out of housing (photos 7 & 8).

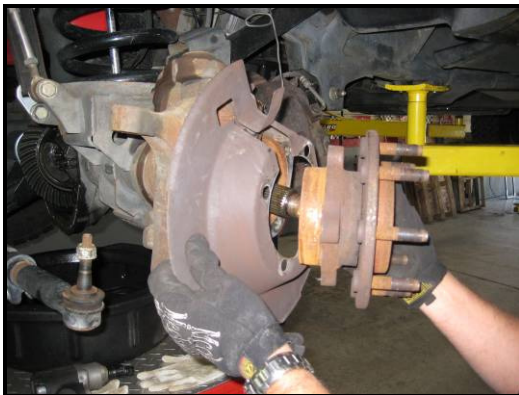


Photo 7



Photo 8

8) Carefully remove u-joint c-clips and u-joint caps from outer axle shaft. Inspect u-joint for wear *now is the time to replace the u-joint if needed* (photo 9).



Photo 9

9) Install new outer axle shaft. Some years require a shim under each side c-clip *shown* (photo 10).



Photo 10

Ball Joint Installation:

10) Disconnect tie rod from knuckle. Loosen upper & lower ball joint nuts. Use a hammer to free knuckle from axle and remove (photos 11 & 12).



Photo 11



Photo 12

11) Remove factory upper & lower ball joints (this requires special tools which are listed in the Dynatrac instructions).

12) Install the new Dynatrac Pro Steer ball joints (photo 13).



Photo 13

13) Re-install the factory knuckle and grease ball joints (photos 14 & 15).



Photo 14



Photo 15

Hub Kit Installation Continued:

14) Re-install axle shaft. Use caution when inserting shaft in axle tube to avoid damaging the inner axle seal (photo 16).



Photo 16

15) Install new spindle and factory dust shield using factory bolts from unit bearing assembly. Attach ABS sensor to new spindle with factory bolt (photos 17 & 18).



Photo 17



Photo 18

16) Install new wheel studs in hub. Be sure they're fully seated (photo 19).



Photo 19

17) Pack new bearings with high quality grease. Install inner bearing and grease seal in hub (photo 20).



Photo 20

18) Place hub assembly on spindle and load hub with more grease (photo 21).



Photo 21

19) Install outer bearing and lock nut assembly (photo 22).



Photo 22

20) Install locking hub assembly and check operation (photo 23).



Photo 23

21) Re-install rotor and caliper (photo 24).



Photo 24

22) Re-install wheel.

23) Repeat steps on opposite side of vehicle.

24) Re-install differential cover and fill with oil (photo 25).



Photo 25

25) Re-check all parts and road test the vehicle. Re-torque lug nuts after 50 miles and again after 200 miles.

Parts Provided By:

Dynatrac Products Inc.
www.dynatrac.com

Installation Performed By:

Mike Duval & Danny Kempf
X-Treme Toyz
www.x-tremetoyz.com