


Hands-on Trucking

By TOM BERG, Truck Editor



This SD114 has a set-forward steer axle; a setback-axle version is also available. Severe Duty trucks feature stout looks and strong underpinnings for vocational duties like dump, mixer, block and crane carrier.

Is There an SD Truck In Your Future?

Freightliner wants to be a dominant player in vocational trucks and is betting its Severe Duty series, including this 114 SFA dumper, will be a winner

When you think “dump truck,” does the name Freightliner also come to mind? Probably not, and the builder intends to change that. For many years it has been a sales leader in on-highway tractors, and meanwhile built capable vocational vehicles whose popularity was far less. Some Freightliner dealers were enthusiastic about certain models, but for various reasons “the factory” did not push them. Now the company has a new series of Severe Duty trucks and is giving them stronger marketing support.

A prime example is the SD114 we have here. It looks like a serious heavy-duty dump truck—its specs say so—and it felt and drove like one. The cab was tight and the doors closed with a satisfying

“thump!” It had a large-bore Detroit DD13 engine and high-capacity axles and suspensions. While underway, it was quiet, with no rattles anywhere. The ride was solid but smooth, steering was precise, and the transmission shifted well. Everything appeared well bolted together. Will it stay that way? Time, miles and hours will tell, but for now I can say that it was a fine drive.

The 114 in the designation indicates its bumper-to-back-of-cab dimension in inches. This version has a forward-set steer axle, called SFA, and there’s a setback-axle, or SBA, version. Our test truck had its steer axle placed 31 inches behind the bumper; a 29.5-inch setting is also available for a slightly longer “bridge” in states demanding it, like California.

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The SBA version's steer-axle setting is 48 inches behind the bumper, so it's closer to the load and can shoulder more of its weight. Some state laws encourage this, and the rearward axle placement shortens the effective wheelbase, so maneuverability is better. It seemed to work that way for two SD114 SBAs that I drove briefly through an orange-coned course set up in a resort hotel's distant parking lot. This was several days before the opening of Conexpo, held in mid-March in Las Vegas.

There's also an SD108, which comes only with a setback axle, placed 42 inches behind the bumper. It uses the same cab but has a shorter nose, and will usually be built as a Class 6 or 7 truck, reps said. Available axles make "heavy 7" versions possible, and one truck on display at the intro had a gross vehicle weight rating of 35,000 pounds. Cummins ISB6.7 and ISC8.3 are the available engines.

The aluminum cab comes from the Business Class M2 series and did not need beefing up for SD use, representatives said, because it was designed to be a vocational cab in the first place. That was in the early 1990s, when Freightliner's top executives had initially planned to go after more vocational business. Attention instead went to Sterling Truck, formed when Freightliner bought the Ford Heavy Truck line. Strong sales failed to follow, and the recent recession forced Sterling's complete cancellation.

The Freightliner FLD-SD, based on the old and very popular highway tractors, is out of production, but the Coronado SD has gotten new emphasis as part of the firm's Severe Duty lineup. There's also



Aluminum cab from the M2 series was originally designed for vocational use, so is strong enough for the SD series, Freightliner says.



Cab is wide enough for three people, but this one's set up for two. Controls for the dump body are between the seats.

SPECIFICATIONS

Truck: Freightliner SD114 SFA, conventional-cab severe-duty vocational truck, BBC 114 inches, main frame w/11-1/8-inch-tall rails and C-channel inserts, GVW 66,000 pounds

Engine: 12.8-liter (781-cu-in.) Detroit Diesel DD13, 450 hp @ 1,800 rpm, 1,650 lbs.-ft. @ 1,100 rpm, EPA 2010 legal, w/engine brake

Clutch: 15.5-in. Eaton Solo Advantage self-adjusting

Transmission: Eaton Fuller RTO-16908LL 9-speed overdrive

Front axle: 20,000-pound Meritor MFS-20-133A w/TRW THP-60 dual hydraulic power steering, on 20,000-pound taperleafs

Rear axles: 46,000-lb. Meritor RT-46-160 w/driver-controlled locking differentials, on 46,000-pound Freightliner Tuf-Trac mechanical suspension, w/4.30 ratio

Wheelbase: 260 inches

Brakes: Meritor Q+ S-cam w/Meritor Wabco ABS

Lift axles: 10,000-lb. Hendrickson FBC installed by Custom Truck Equipment

Fuel tank: 70-gallon polished aluminum

Body: 18-foot Brandon FHD-18-P steel end-dump, installed by Custom Truck Equipment

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the V (for vocational) derivatives of the Business Class M2 series, but a V's main distinction is the availability of an integral forward frame extension. The M2V and other vocational forms of the Biz Class will phase out after the new SDs come on line over the next year.

Smooth shifter

This SD114 dumper had only a few thousand miles on its odometer, so I expected a stiff gearshift lever, but no, its linkage was set up well enough for me to do clutchless shifts of the Eaton Fuller 8LL right off the bat. Yes, the clutch is there for a reason and I used it most of the time, but that I could float-shift says a lot for this aspect of the truck's design and assembly.

Also pleasing was its maneuverability, even with the 20,000-pound steer axle's big tires and wheels. I could make tight right turns on city streets from one right lane to the next, barely nudging the nose into a second lane on the street I entered. The wheel cut is said to be 45 degrees—pretty sharp for a forward-set axle.

That it rode smoothly with no load in the bed was a tribute to the fore and aft suspensions—taperleaves up front and a mechanical Tuf-Trac on the tandem—and how they worked with the stiff, reinforced main frame to control road-induced vibrations. Our test truck had two Hendrickson liftable and steerable pusher axles, but with no load in the bed their wheels stayed in the air. With a load and the wheels pressing on the ground, the ride probably would've become slightly bouncy.

No load also meant the 450-horse DD13 loafed much of the time. I did climb one moderate upgrade, an on-ramp to the State Route 215 beltway on the far west side of Las Vegas, where I

had to put my foot into it. On such a grade the Detroit would labor if 20 or so tons of dirt, rock or whatever were in the bed.

If you need more go-ability, the DD13 goes to 470 horsepower. If you want still more, you've got to buy a bigger chassis, which in Freightliner's case is the premium Coronado SD. It comes with a DD15 or the Cummins ISX15. But lighter 11-, 12- and 13-liter diesels have long been favored in heavy dump trucks, which theoretically run empty half the time, but also




DD13 is the largest engine available in the SD114, while lighter Cummins ISC and ISL diesels are options. Big duplex wheels can cut up to 45 degrees to get the truck through tight corners.

need high payload capacity. So the DD13 is the right size for many jobs.

Midrange power

The SD114 can also be had with smaller-block diesels from Cummins: the 8.9-liter ISL9 and the ISC8.3. These Baby 8s, defined as Class 8 trucks with midrange power trains, will go to customers who want less tare weight and/or lower cost. Those midrange-size diesels save about 600 pounds and several thousand dollars compared to the large-bore DD13, which makes them attractive to mixer operators and municipalities.

Fleet managers who get their purchasing money from taxpayers want to show that they're frugal, and for them the SD108 and 114 come standard with a satin-finish black grille and trim. Those who pay their own bills and want sharper looks can choose a chrome package, which includes 10 small accents in the black grille, plus chrome bezels around the grille and headlamps. Bright-metal mirrors, bumper and windshield visor are also available.

The prominent fenders are capped by flexible wheel flares that are designed to take impacts. Mack's Granite and International's WorkStar also have them. And that brings up a point: Freightliner will have to work very hard to make serious inroads in the construction market because there are some well-entrenched competitors out there. You might run some of them, but your local Freightliner dealer will want you to take a look at these new SDs. I'll bet you'll be impressed. 



Blue Tec exhaust aftertreatment equipment with particulate filter is in a "1-Box" cube behind the steps, leaving the back-of-cab area clear for close body mounting. Tanks for fuel and diesel exhaust fluid are on the left side.