Is a ***H***eavy ***D***uty ***T***ruck For YOU?

Overview of HDT's

The REALLY basic stuff…..

2024 Heavy Duty Truck Rally

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What is an HDT?

First – What is an HDT

Heavy Duty Truck

- Class 7 or Class 8 (26,001 lbs GVWR+)
- Volvo, Kenworth, Freightliner, Mack, etc.
- Generally Tandem rear axle, before conversion, but not always.
- Intended for overnight use, but not always (sleeper cab/condo).

Medium Duty Truck

- Class 4, 5, 6 (under 26,000 lbs GVWR)
- Ford F450, F550, F650, RAM 5500, Freightliner M2 106
- Single rear axle, almost always.
- Often 4-door, but not always.
- Intended for regional daily use.

What is an HDT?

MDT

Freightliner M2-106 by Sportchassis

- Under 26,000 lb GVWR
- 8.3 liter engine, 350/375hp, 1050 torque
- Allison 3200 TRV automatic trans/ 6-speed
- Often 4-door
- 23-24’ (about)

HDT

Volvo 860 by RVH Lifestyles

- Over 26,000 lb GVWR
- 13 liter engine, 455+ hp, 1850 torque
- Automated trans (IShift)/ 12-speed
- Usually a sleeper
- Usually 24’-30’ (as shown, 30’)

Shorter “Daily Drivers”

HDT’s Do Not Have to be “Big” - They can be “pickup size”

Volvo 610 with 61” sleeper. 182” wb.

Volvo 730 with 77” sleeper. 205” wb.

What is an HDT?

Volvo VNR 400 with 40” sleeper.

- Short sleeper
- D13 engine with 455hp/1850 torque
- Ishift automated transmission
- Short wheelbase – ideally suited to be a “daily driver”.

What is an HDT?

Sometimes size DOESN'T matter – Volvo VNM 630 with 61” sleeper.

- D11 engine with shorter hoodline, 19.5” wheels
- IShift automated transmission
- Short wheelbase – ideally suited to be a “daily driver”
- GVWR of 19,500 lbs

What is an HDT?

Sometimes size DOESN'T matter – this is an HDT.

- Freightliner day cab
- 600+ HP
- 168” wheelbase

- Volvo 860
- 41’ long
- 312” wheelbase

HDT’s can be BIG or SMALL

Pros and Cons of HDT's

Pro's

- **Safety** - mass, height, visibility, tow rating, brakes, emergency handling
- **Flexibility** – carry car, MC, sleeper, office, guest quarters
- **Comfort** – ride, noise level
- **Power** – pulls any RV easily
- **Durability** - outlasts pickups
- **Service** – available almost anywhere, and generally fast
- **Attention** – "cool" factor

Con's

- **Initial cost**; ongoing maintenance
- **Size** – large sleepers are BIG, daily transport issues
- **Licensing** – often requires an upgrade
- **Legalities** – overlength/width issues, etc.
- **Storage** – HOA & community issues.
- **Access** - getting in and out
- **Financing**
- **Insurance**

An HDT is NOT for Everyone – sometimes a Motorhome makes more sense

Volvo Identification
Gen1 1996-2002

- Vertical grill design
- Rectangular air intake on side of hood.

Volvo Identification

Gen3 2019 +

Gen2 2003 -2018

Volvo Gen2 Trucks

Volvo Gen 3 Dimensional Changes

Just some….there are many

Old model vs. Generation 3 model

- 780 = 860; same size condo; width, length, height (77” condo)
- 730 = 740; same width/height, but 70” condo(7” shorter)
- 670 = 760; Biggest change; 5” wider, 9” longer (70” condo)

- Gen3: The 740 and 760 are the same body size; 740 is mid height/760 is full height. Fleet trucks.
- Gen2: The 730 and 780 are the same body size; 730 is mid height/ 780 is full height.

Which Truck is Right for YOUR Mission
Tall or Short?

Why a Volvo?

- Best automated transmission
- Quietest interior
- Very good ride
- Full width body
- Workstation
- Standard driver airbag
- Metal reinforced cab designed to protect passengers
- Engine designed to go under cab in collision
- Less “truck feel”

Volvo Gen4 - 860 & 840

Both have 74” sleepers

Transitioning to an HDT
Considerations

- Deciding which size is right – Understanding your “mission profile” is CRITICAL
- Licensing – may be simple or complex depending on domicile
- Registration – Motorhome is ideal, but not always possible
- Financing – Generally difficult; local bank, home equity line, Credit Union, Lightstream.com
- Insurance – not always easy to get; can be expensive in relative terms
- Maintenance of older trucks
- How to *Find* it……
- How to *Convert* it…..
- How to get *Rid* of it …….

The Conversion Process

It is not just about a body; We find the body averages half the total upfit cost (or less)

- **Repairs**, cosmetics, removal of commercial elements.
- **Towing**: suspension hitch, receiver hitch, frame extension, etc.
- **Lighting and Electrical**: accent lights, chicken lights, inverters, APUs, etc.
- **Accessory Upfit**: cameras, radios, appliances, sinks, etc.
- **Interior Renovations**: seats, seatbelts, windows, insulation, soundproofing, etc
- **Exterior renovations**: mirrors, grills, bumpers, lighting, etc

Should I Single ?

Singling - removing one of the two rear axles on a “tandem” axle truck

Pro

- More bed storage
- Less maintenance
- Potentially shorter (daily driver)
- Less tires to check/worry about
- Better traction & ride
- Higher/easier resale as RV Hauler
- Potentially easier to insure
- Better fuel economy

Con

- Cost (about $6,000)
- Hassle of process – reprogramming, driveline vibration, etc.
- Less carrying capacity
- Less brakes - but typically not less braking
- Looks - to some

Hauler Bodies

- For MOST “mission profiles” you need a bed to get best function
- Prices continue to rise….
- Prices can range from $1000 for a simple wood bed, to $40,000+ for a complex smart car hauler or Jeep hauler
- A simple smart hauler will be in the $12-25K range, a skirted/painted bed with integrated storage will be $35K+.
- “Time-to-build” ranges from a weekend to three months, depending on complexity. Typical smart hauler is 1-2 months for the bed only.
- Doing it yourself is feasible if you have the skills, tools, time, will and location. You will save at least 50% if you DIY.

Hauler Bodies
Who Will Do It?

- Any weld shop can build a basic body - the design and engineering is the hard part, not the actual build
- For custom/one-off's, you have to understand your needs and supervise the project
- "Most" builders only do bodies - not a turnkey product.
- There are some well known body builders across the nation.
  - Herrin in Texas - no longer building HDT's
  - Jesse Hall in Lakeland FL
  - RVH Lifestyles, Kansas
  - Gregg Shields in Calgary

New vs. Used

Things to Consider

- New Volvo Prices - RVH Spec's
  - In 2019 a Volvo 860 was $140K
  - In 2022 a Volvo 860 was $163 + $4500 surcharge ($167,500).
  - In 2023 a Volvo 860 was $205K plus a possible surcharge.
  - In 2024 an 860 is 196K
- A late model (2019-2023) used truck will be in the $65-100K range with around 400,000 - 200,000 miles.
- On average, the older the truck, the more you will invest in ongoing maintenance. Period. There is a "statistical" reason fleets flip trucks.

New vs. Used

Things to Consider

- Engines do not wear out, as much as all the components around it do. **ESPECIALLY pollution components and sensors**.
- On a truck with emissions reserve **$0.50 - $0.65/mile** for maintenance.
- Warranties are available on used trucks (up to 10 years old) – but they don’t cover everything.

New vs. Used

Things to Consider

- Buy from another RVer if possible – the trucks tend to be cared for.
- If your usage timeline is 10+ years a new truck starts to make sense, especially if you are looking for low mileage used.
- Advice/Opinion: don’t overinvest in bodies/upgrades on older trucks. There is a sweet spot at around $100-120K where you can recoup a major part of your investment.

Hitches

- A suspension hitch is a wise investment. Do not believe those that preach “it does not matter”.
  - ET Hitch
  - Trailer Saver
  - …..there are some others

- Suspension pinbox with a non-suspension hitch is second best, but OK
  - GenY pin boxes work with lighter trailers.
  - Reese Airborne
  - Mor/Ryde cushioned pinbox

Hitches

Can you haul with the Commercial Hitch?

- Some do; in our opinion it is not wise
- Many RVs cannot handle the shock loading on the frame
- No sideways motion
- Exception is the Spacecraft Semi RV that is intended for commercial hitch use.

Hitches

Behind the axle

Hitches

- Why is the hitch behind the axle? CERTAINLY, that is “unsafe”??!!
  - Provides additional cargo space
  - Does not unload the front axle enough to matter (in most situations)
  - Better maneuvering – faster reaction to turns
  - Better tracking in corners
  - Careful calculations required if you exceed 6’ cantilever

Hitches - Issues

- Suspension hitches allow the trailer to behave “naturally”
- Sway could be seen in trailers that have very light pin weights (axles forward)
- Sway can be seen in trailers heavily loaded in the rear - some toy haulers, some rear kitchens

This is a function of trailer “weight and balance”

Campgrounds
"I'm so BIG; Will I fit?"

- You need "big rig" sites; there WILL be restrictions
- May not be able to keep truck on site in every situation
- Use Resources
  - HDT Campground Guide – online
  - "Big Rig" Campgrounds – online
  - Google Maps/Earth for viewing sites and access

You have to do your homework

Discussion and Questions