

**W31962**  
**GM VORTEC 8100 V8 8.1 LITER GAS ENGINE**  
**MARCH 25, 2009**

**WORKHORSE (GVW RATING 23,500 LB) CHASSIS 190" WHEELBASE**

**SELECTED BODY OPTIONS**

- RAILS CONFIGURED FOR 17 - 19 FT BODY (190" WB)

**AXLES**

- AXLE REAR 15,500 LB
- REAR AXLE 5.13 RATIO
- DUAL REAR WHEELS

**SUSPENSION**

- SUSPENSION FRONT 8,000 LB, I-BEAM AXLE
- SUSPENSION REAR 15,500 LB

**ENGINE AND TRANSMISSION**

- GM VORTEC 8100 V8 8.1 LITER GAS ENGINE
- TRANSMISSION AUTO 5 SPD, SERIES 2200 HS/RDS
- FEDERAL EMISSIONS, REQUIRED FOR ALL VEHICLES TO BE REGISTERED IN FEDERAL EMISSIONS AREAS
- EMISSION SYSTEM FEDERAL, TIER 2
- EVAPORATIVE SYSTEM EMISSION
- REGISTRATION EMISSION, CERTIFICATION, FIFTY STATE
- ENGINE POWER RATING 310 HP @ 3750 RPM

**WHEELS AND TIRES**

- WHEEL COLOR GRAY
- TIRE FRONT 245/70R19.5 /F HWY
- TIRE BRAND FRONT - GOODYEAR
- TIRE REAR 245/70R19.5 /F HWY
- TIRE BRAND REAR - GOODYEAR

**BRAKES**

- PWR, FRT&RR DISC, ANTLCK, 4SEN, 70 MM QUADRAULIC
- HAND APPLIED PARKING BRAKE
- TRANSMISSION MOUNTED DRUM TYPE SECURED WITH LOCK WASHERS & LOCTITE
- SIZE: 11 X 2.5 INCHES
- 

**DRIVESHAFT**

- SPL70 DRIVESHAFTS (RE-LUBE)

**BATTERY**

- HEAVY DUTY BATTERY 750 CCA

- SINGLE GROUP 31 BATTERY

#### **ALTERNATOR**

- 145 AMP ALTERNATOR
- DELCO BRAND

#### **STARTING SYSTEM**

- DELCO 12 VOLT STARTER - SERIES 29 MT WITH OVER-RUNNING CLUTCH AND SOLENOID-CONTROLLED
- SLIDING PINION

#### **STEERING**

- POWER STEERING WITH DELPHI TILT COLUMN AND 4 SPOKE WHEEL
- 48-DEGREE WHEEL CUT ANGLE
- ZF VARIABLE RATIO STEERING GEAR
- ZF BELT-DRIVEN STEERING PUMP 2.24 GPM MIN FLOW / 4.22 GPM MAX FLOW
- 16.6 : 1.0 STEERING RATIO

#### **FUEL SYSTEM**

- FUEL TANK 151L, 40 GAL DEEP C/MNT

#### **INSTRUMENTS**

- GAUGES: ACTIA "SMART" INSTRUMENT CLUSTER WITH SPEEDOMETER, TACHOMETER, AND FUEL GAUGE PLUS DRIVER SELECTABLE LCD INFORMATION WITH DIGITAL READ OUT FOR ALL ENGINE FUNCTIONS AND VEHICLE OPERATING DATA
- NOTE: ALL GAUGES AND LIGHTS MOUNTED TO BE VISIBLE FROM DRIVER'S SEAT
- HORN: STANDARD 2-NOTE MOUNTED ON LH FIREWALL
- SPEEDOMETER: ACTIA 5 INCH DIAMETER ELECTRONIC (0-85 MPH)
- LIGHTS/WARNING: FRONT TURN SIGNALS, PARKING, HAZARD WARNING, PARK BRAKE ON, HIGH BEAM HEADLIGHTS, TURN SIGNAL INDICATORS, LOW CHARGE
- PROVISIONS DAYTIME RUNNING LAMPS
- CLEAN POWER SOURCE FOR HAND HELD COMPUTER
- PROVISIONS DAYTIME RUNNING LAMPS
- WIPER SYSTEM WINDSHIELD, PULSE
- CRUISE CONTROL AUTOMATIC, ELECTRONIC
- LED COMPATIBLE FLASHER MODULE
- NO KEY COLUMN
- 75 MPH SPEED LIMITER
- LEVER TRANS SHIFTER (REMOTE DA MT) W/PARK POS
- AIR INTAKE RESTRICTION INDICATOR

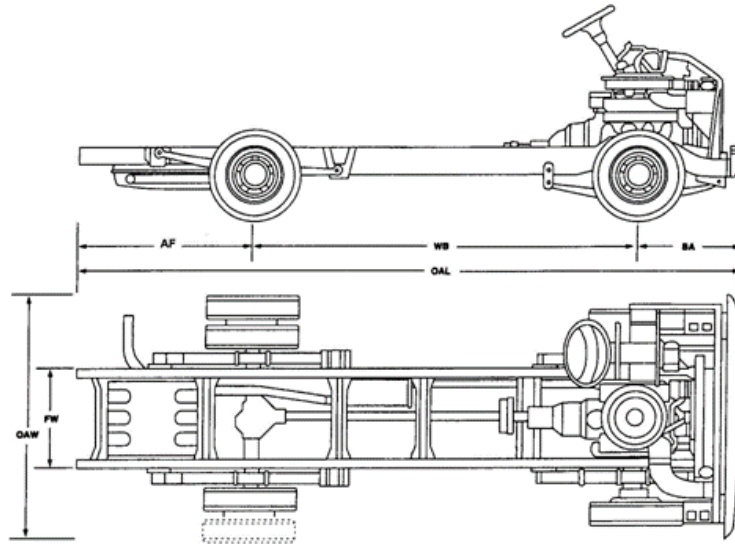
#### **COUNTRY CODE**

- UNITED STATES PROVISIONS

#### **WARRANTY**

- STANDARD LIMITED WARRANTY, CHASSIS: 3 YEARS - 36,000 MILES - INCLUDING 24 HOUR ROADSIDE ASSISTANCE

## VEHICLE DIMENSIONS



MODEL		W31962
WHEELBASE (in)	WB	190
OVERALL LENGTH (in)	OAL	321.11
OVERALL WIDTH (in) (SRW and DRW)	OAW	92.7
FACE BAR TO FRONT AXLE (in)	BA	34.21
REAR AXLE TO END OF FRAME (in)	AF	96.9

## FRAME SPECIFICATIONS

MODEL	SIDE RAIL DIMENSIONS			SECTION MODULUS RAILS ONLY (in)	YIELD STRENGTH (PSI)	RBM OF FRAME	WIDTH OVER RAILS	
	WIDTH (in)	DEPTH H (in)	THICKNESS (in)				FRONT (in)	REAR (in)
W31962	3	9.625	0.25	10.13	50,000	506,500	40	34

## FRONT AXLE SPECIFICATIONS

<b>AXLE TYPE</b>	Westport Mono-Beam Axle with double drop
<b>CAPACITY</b>	AXLE FRONT 9,000 LB (FP6)
<b>KPI - KPI (in)</b>	72
<b>WHEEL TRACK (mm)</b>	2,120.9
<b>SPRING TRACK (mm)</b>	988
<b>KPI (°)</b>	5.5
<b>KNUCKLE</b>	Regular spindle with bolt-on torque plate for mounting caliper.
<b>WHEEL BEARINGS</b>	Oil lubricated Timken FS taper roller bearings.
<b>LUBRICANT</b>	SAE 90 gear oil

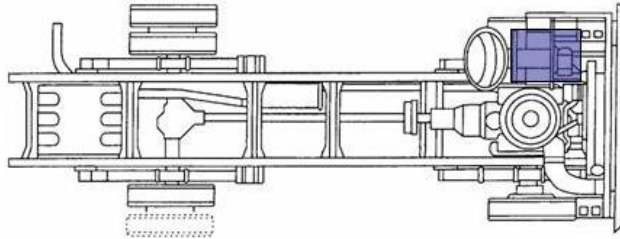
## REAR AXLE SPECIFICATIONS

<b>AXLE TYPE</b>	STABILRIDE DANA S130
<b>WHEEL CONFIGURATION</b>	DUAL REAR WHEELS (R05)
<b>CAPACITY</b>	AXLE REAR 15,500 LB (GL8)
<b>PINION &amp; RING GEARS</b>	HYPOID
<b>DIFFERENTIAL TYPE W/BEARINGS</b>	STANDARD TAPERED ROLLER

## SUSPENSION SPECIFICATIONS

<b>GVWR</b>	GVW RATING 23,500 LB (C8Z)
<b>REAR WHEELS</b>	DUAL REAR WHEELS (R05)
<b>FRONT AXLE CAPACITY</b>	AXLE FRONT 9,000 LB (FP6)
<b>FRONT SUSPENSION</b>	SUSPENSION FRONT 8,000 LB, I-BEAM AXLE (FV5)
<b>FRONT GAWR</b>	8,000 LB
<b>REAR AXLE CAPACITY</b>	AXLE REAR 15,500 LB (GL8)
<b>REAR SUSPENSION</b>	SUSPENSION REAR 15,500 LB (GP8)
<b>REAR GAWR</b>	15,500 LB

## POWER STEERING SPECIFICATIONS



<b>TYPE PUMP</b>	<b>ZF, INTEGRAL, ROTARY VANE</b>	<b>MOUNTING LH SIZE OF BLOCK</b>	
W62	Driven by: Belt from Crankshaft Pulley	2.24 gpm Min. Flow Rate	4.22 gpm Max. Flow Rate

## POWER BRAKE APPLICATIONS

4-WHEEL ANTI-LOCK, 4-WHEEL DISC BRAKES					PARK BRAKE TYPE	APPLY SYSTEM	
ROTOR SIZE: DIA. x TH. (in)	CALIPER PISTON DIA. (mm)	FACING CONTACT AREA/AXLE (sq. in)	PAD SIZE: LxWxTH (in)	SWEPT AREA/AXLE (sq. in)		BOOSTER TYPE	MASTER CYL. DIA. (in)
15.38 x 1.54	4 x 70 mm	73.56	(18.39) x .74	392.4	TRANSMISSION-MOUNTED DRUM BRAKE	HYDRO MAX	2

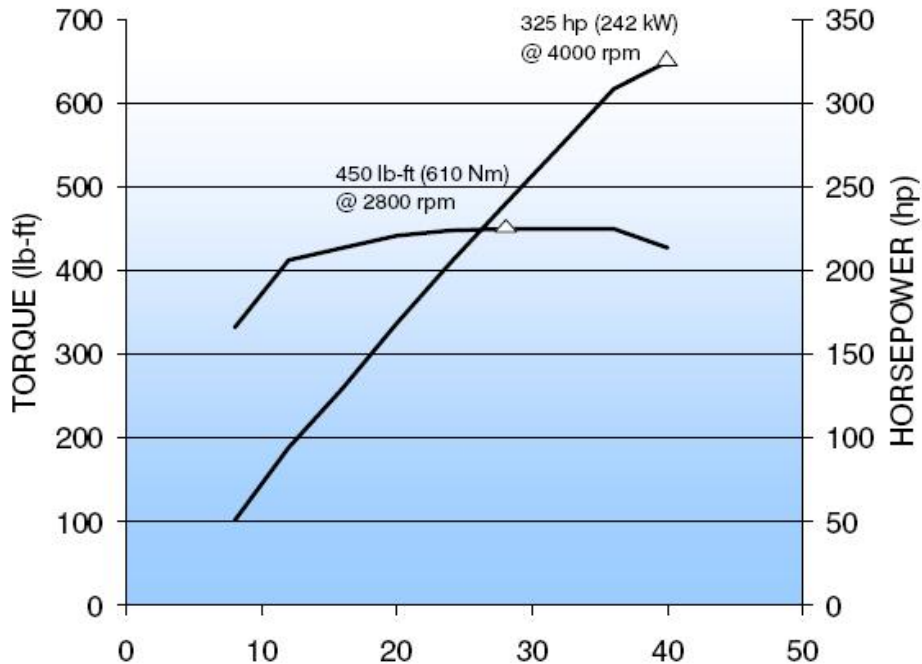
# GM VORTEC 8.1L – V8



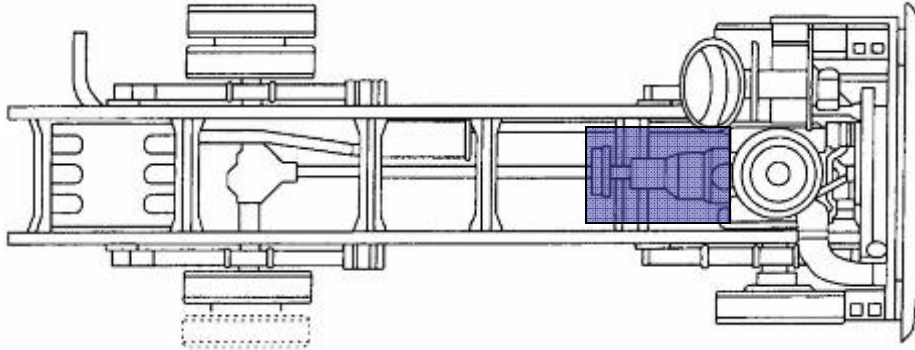
Vortec 8.1L V8  
2008 (L18)

Engine type	4 Cycle
Service type	Naturally Aspirated
Engine model number	L18
Number of cylinders	8
Number of valves per cylinder	2
Configuration	V
Bore	107.95 mm
Stroke	111 mm
Displacement	8128cc (496 ci)
Compression ratio	9.1:1
Firing order	1 - 8 - 7 - 2 - 6 - 5 - 4 - 3
Rotational direction	Longitudinal
Fuel system	Sequential Fuel Injection
Net power @ rpm	310 hp @ 3,750 rpm
Peak torque @ rpm	455 lb-ft @ 3,200 rpm
Idle speed no-load rated	720 +/- 50 rpm
Speed full-load	4800 rpm
Exhaust	Single
Engine Vin code	G

2008 Vortec 8.1L V8 (L18) LRW option



## ALLISON 2200 HS AUTOMATIC TRANSMISSION



<b>TRANSMISSION MODEL</b>	<b>AUTOMATIC 5-SPEED w/OVERDRIVE</b>
<b>RPO CODE</b>	<b>MTX</b>
<b>GEAR RATIOS</b>	
<b>First</b>	<b>3.10</b>
<b>Second</b>	<b>1.81</b>
<b>Third</b>	<b>1.41</b>
<b>Fourth</b>	<b>1.00</b>
<b>Fifth</b>	<b>0.71</b>
<b>Reverse</b>	<b>-4.49</b>
<b>GEAR TYPE</b>	<b>Planetary</b>
<b>TORQUE CONVERTER</b>	
<b>Element Types</b>	<b>Pump/Stator/Turbine</b>
<b>Lock-up Clutch</b>	<b>Automatic</b>
<b>Model</b>	<b>TC-210 (w/8.1 1L)</b>
<b>Model</b>	<b>TC-211 (w/4.5 1L)</b>
<b>LUBRICANT TYPE</b>	<b>Transynd ®</b>
<b>LUBRICANT CAPACITY</b>	
<b>Dry (Deep Pan):</b>	<b>17L (19 Qts.)</b>
<b>Refill</b>	<b>10L (11 Qts.)</b>
<b>MAX ENGINE TORQUE (lb.-ft.)</b>	<b>550</b>
<b>MAX GVW (lbs.)</b>	<b>26,000</b>