

**W31042**  
**GM VORTEC 6000 V8 6.0 LITER GAS ENGINE**  
**MARCH 25, 2009**

**WORKHORSE (GVW RATING 16,000 LB) CHASSIS 133" WHEEL BASE**

**SELECTED BODY OPTIONS**

- RAILS CONFIGURED FOR 11 - 12 FT BODY (133" WB)

**AXLES**

- 11,000 LB. DANA M80 HYPOID REAR AXLE
- REAR AXLE 5.13 RATIO
- DUAL REAR WHEELS

**SUSPENSION**

- 5,800 LB. 2-STAGE PARABOLIC FRONT SUSPENSION
- 11,800 LB. 2-STAGE PARABOLIC REAR SUSPENSION

**ENGINE AND TRANSMISSION**

- GM VORTEC 6000 V8 6.0 LITER GAS ENGINE
- 307 HP @ 4600 RPM, 357 LB-FT TORQUE @ 4400 RPM
- GM 4L80-E ELECTRONIC 4-SPEED TRANSMISSION WITH OVERDRIVE
- 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
- TRANSMISSION OIL COOLER
- ENGINE ALARM

**WHEELS AND TIRES**

- WHEEL COLOR GRAY
- TIRE FRONT 225/70R19.5/F HWY
- TIRE BRAND FRONT - GOODYEAR
- TIRE REAR 225/70R19.5/F HWY
- TIRE BRAND REAR - GOODYEAR

**BRAKES**

- BREMBO 4-WHEEL DISC BRAKES (2 X 68 MM CALIPER DIAMETER)
- MERITOR WABCO 4-CHANNEL ABS SYSTEM WITH FULL J-1939 DIAGNOSTIC CAPABILITY
- FRONT & REAR ROTOR SIZE: 12.67 X 1.2 INCH DIAMETER
- MASTER CYLINDER TYPE: 1.57 INCH DIAMETER DELPHI HYDROBOOST 50/50 SPLIT SYSTEM
- BRAKE LINES: ALUMINIZED STEEL
- FLUID TYPE: DOT 3
- HAND APPLIED PARKING BRAKE
- TRANSMISSION MOUNTED DRUM TYPE SECURED WITH LOCK WASHERS & LOCTITE

- SIZE: 11 X 2.5 INCHES

#### **COOLING**

- 15.6 QUART CAPACITY CROSS FLOW RADIATOR
- 549 SQUARE INCH FRONTAL AREA X 1.34 INCH THICK WITH ONE ROW OF 34 MM WIDE CROSS FLOW TUBES
- EXTERNALLY MOUNTED EXPANSION TANK
- FAN TYPE: VISCOUS FAN DRIVE MOUNTED TO A 20 INCH 8 BLADE FAN
- THERMOSTAT: 187 DEGREES F
- MOUNTING: RUBBER ISOLATORS - (2) UPPER AND (2) LOWER
- SHROUD: TWO PIECE - PLASTIC
- HOSE TYPE: EPDM RUBBER
- ANTIFREEZE: DEX-COOL (GM 6277 M) 5-YEAR COOLANT
- FAN BELTS: SINGLE SERPENTINE FOR ACCESSORIES - INDEPENDENT A/C BELT

#### **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
- 50-DEGREE WHEEL CUT ANGLE
- ZF VARIABLE RATIO STEERING GEAR
- ZF BELT-DRIVEN STEERING PUMP 1.84 GPM MIN FLOW / 3.17 GPM MAX FLOW
- 16.6 : 1.0 STEERING RATIO

#### **FUEL SYSTEM**

- FUEL TANK 151L, 40 GAL C/MNT
- FUEL TANK TYPE: SINGLE STEEL TANK MOUNTED IN BETWEEN FRAME RAILS BEHIND REAR AXLE
- FUEL HOSES: FLUROCOMP TEFLON
- FUEL PUMP: DELPHI ELECTRIC IN-TANK FUEL MODULE
- FUEL FILTER: DELPHI FRAME MOUNTED REPLACEABLE FUEL FILTER

#### **EXHAUST SYSTEM**

- 3 INCH DIAMETER ALUMINIZED STEEL TUBING EXHAUST SYSTEM
- FORWARD AND REARWARD OF MUFFLER
- TAIL PIPE EXITS BEHIND LEFT REAR WHEEL

#### **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
- 75 MPH SPEED LIMITER
- LEVER TRANS SHIFTER (REMOTE DA MT) W/PARK POS
- AIR INTAKE RESTRICTION INDICATOR

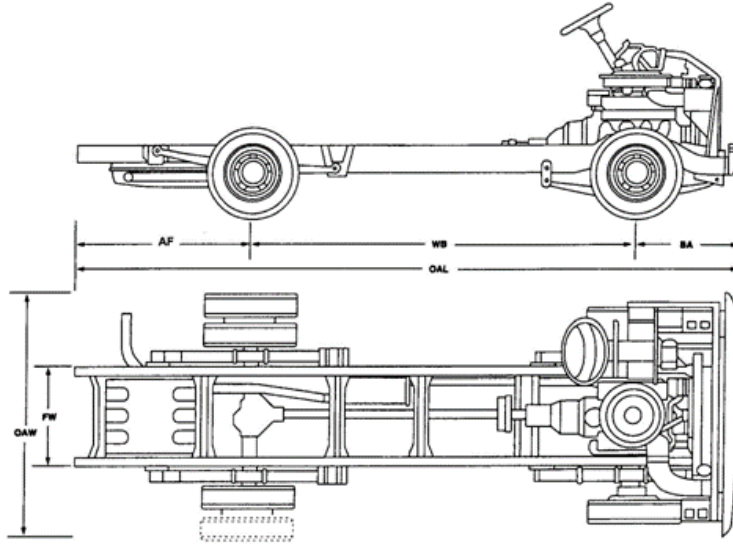
#### COUNTRY CODE

- UNITED STATES PROVISIONS

#### WARRANTY

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

## VEHICLE DIMENSIONS



MODEL		W31042
WHEELBASE (in)	WB	133
OVERALL LENGTH (in)	OAL	236.3
OVERALL WIDTH (in) (SRW and DRW)	OAW	92.7
FACE BAR TO FRONT AXLE (in)	BA	36
REAR AXLE TO END OF FRAME (in)	AF	69.8

## 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)
W31042	2.57	7.01	0.213	5.55	32,000	177,600	28.14	33.64

## FRONT AXLE SPECIFICATIONS

<b>AXLE TYPE</b>	WESTPORT MONO-BEAM AXLE WITH DOUBLE DROP
<b>CAPACITY</b>	AXLE FRONT 6,000 LB (FN9)
<b>KPI - KPI (in)</b>	66
<b>WHEEL TRACK (mm)</b>	1,968.5
<b>SPRING TRACK (mm)</b>	812.8
<b>KPI (°)</b>	9.45
<b>KNUCKLE</b>	LIVE SPINDLE WITH INTEGRATED CALIPER MOUNTING AND INTEGRATED TIE-ROD ARMS 9.45
<b>WHEEL BEARINGS</b>	MAINTENANCE FREE TIMKEN UNI-PAC (55 mm)
<b>LUBRICANT</b>	SEALED FOR LIFE

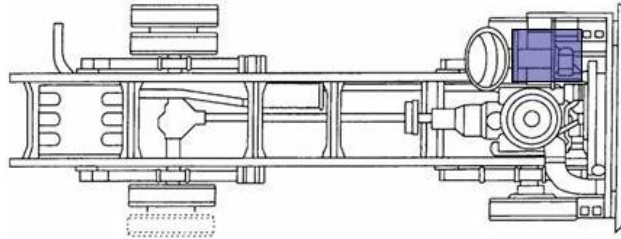
## REAR AXLE SPECIFICATIONS

<b>AXLE TYPE</b>	DANA-SPICER FULL-FLOATING SPLINE ATTACH W/CAP DANA M80
<b>WHEEL CONFIGURATION</b>	DUAL REAR WHEELS (R05)
<b>CAPACITY</b>	AXLE REAR 11,000 LB (GL4)
<b>PINION &amp; RING GEARS</b>	HYPOID
<b>DIFFERENTIAL TYPE W/BEARINGS</b>	PINION TAPERED ROLLER

## SUSPENSION SPECIFICATIONS

<b>GVWR</b>	GVW RATING 16,000 LB (C7P)
<b>REAR WHEELS</b>	DUAL REAR WHEELS (R05)
<b>FRONT AXLE CAPACITY</b>	AXLE FRONT 6,000 LB (FN9)
<b>FRONT SUSPENSION</b>	SUSPENSION FRONT 5,800 LB, I-BEAM (FK8)
<b>FRONT GAWR</b>	5,800 LB
<b>REAR AXLE CAPACITY</b>	AXLE REAR 11,000 LB (GL4)
<b>REAR SUSPENSION</b>	SUSPENSION REAR 11,800 LB, LOW POSITION (GR2)
<b>REAR GAWR</b>	11,000 LB

## POWER STEERING SPECIFICATIONS



<b>TYPE PUMP</b>	<b>ZF, INTEGRAL, ROTARY VANE</b>	<b>MOUNTING LH SIZE OF BLOCK</b>	
W42	Driven by: Belt from Crankshaft Pulley	1.85 gpm Min. Flow Rate	3.17 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)
#ROTOR#	#CALIPER#	#FACINGCONTACT#	#PADSIZE#	#SWEPTAREA#	#PARKBRAKE#	#BOOSTER#	#MASTERCYL#

# GM VORTEC 6.0L – V8



<b>Engine Type</b>	<b>4 Cycle</b>
<b>Service Type</b>	<b>Naturally Aspirated</b>
<b>Engine model Number</b>	<b>LY6</b>
<b>Number of Cylinders</b>	<b>8</b>
<b>Number of Valves per Cylinder</b>	<b>2</b>
<b>Configuration</b>	<b>V</b>
<b>Bore</b>	<b>101.627 mm</b>
<b>Stroke</b>	<b>92.0 mm</b>
<b>Displacement</b>	<b>6.0 L/5967 cc</b>
<b>Compression ratio</b>	<b>9.4:1</b>
<b>Firing order</b>	<b>1-8-7-2-6-5-4-3</b>
<b>Rotational Direction</b>	<b>CW</b>
<b>Dry Weight (less clutch)</b>	<b>609 lbs</b>
<b>Fuel System</b>	<b>Sequential Fuel Injection</b>
<b>Net power @ rpm</b>	<b>307 hp @ 4,600 rpm</b>
<b>Peak torque @ rpm</b>	<b>357 lb-ft@ 4,400 rpm</b>
<b>Idle speed no-load Rated</b>	<b>550 rpm</b>
<b>Speed Full-Load</b>	<b>5000 rpm</b>
<b>Exhaust</b>	<b>SINGLE</b>
<b>Engine VIN Code</b>	<b>7</b>

## 2008 LY6 6.0L Small Block WCC

### Isoplotted from SAE J1349\* Power Test

Active Generator and Power Steering Pump; BP = 46.3 kPa @ 4600 RPM; WCC Induction and Air Filter  
WTH WCC STEADY STATE DISENGAGED FAN LOSSES

