

# TECHNICAL SPECIFICATION

## MD6 42R



			WEIGHT (LB)		
APPLICATION PACKAGES	DESCRIPTION	FRONT	REAR		
S	CHASSIS HEIGHT	DOCK HEIGHT	0	0	

			WEIGHT (LB)		
CUSTOMER/VEHICLE INFO	DESCRIPTION	FRONT	REAR		
S	CHASSIS (BASE MODEL)	MD642 - 42R MEDIUM DUTY, CLASS 6 w/ 6.7L, (MAX 25,995lbs GWR)	2,095	552	
S	ASSEMBLY PLANT	FACTORY USA (RV, MACK)	0	0	
	VEHICLE USE & BODY/TRAILER TYPE	SERVICE/UTILITY TRUCK	0	0	
	VEHICLE VOCATION	CONSTRUCTION SERVICE	0	0	
	CUSTOMER FLEET SIZE	REGIONAL FLEET 25 OR MORE VEHICLES IN OWN FLEET OF ANY VEHICLE BRAND	0	0	
S	TYPE OF SERVICE	COMMERCIAL	0	0	
S	WARRANTY REGISTRATION LOCATION	USA - WARRANTY REGISTRATION LOCATION	0	0	
	EMISSION WARRANTY CERTIFICATION	EPA (only) Cummins Diesel	0	0	
S	IDLE EMISSION CERTIFICATION	IDLE EMISSION CERTIFICATION, CARB 08	0	0	
S	INITIAL REGISTRATION LOCATION	USA REGISTRATION	0	0	
S	LANGUAGE-PUBS/DECAL/SIGNS	ENGLISH	0	0	
S	OPERATING TERRAIN GRADE CONDITIONS	CITY, STARTING GRADES<6%	0	0	
S	LOADING SURFACE FACTOR	ASPHALT LOADING AND / OR UNLOADING SURFACE	0	0	

			WEIGHT (LB)		
ENGINE & TRANSMISSION	DESCRIPTION	FRONT	REAR		
S	EMISSION ON BOARD DIAG CONTROL	EMISSION OBD, DISPLAY ONLY, USA2016	0	0	
	ENGINE / MOTOR	ISB6.7-300 DIESEL CUMMINS 300HP @ 2600RPM (GOV) 660 LB-FT, US21	1,597	-39	
	TRANSMISSION	2500 RDS 6 SP-ALLISON RUGGED DUTY SERIES GEN 6 (WITH PTO PROVISIONS)	309	91	
S	FUELSense CALIBRATION	ALLISON FUELSense, NEUTRAL AT STOP	0	0	
S	TRANSM AUTO NEUTRAL ON P-BRAKE	AUTO NEUTRAL SINGLE INPUT WITH SHIFT SELECTOR OVERRIDE	0	0	

			WEIGHT (LB)		
ENGINE & TRANSMISSION EQUIPMENT	DESCRIPTION	FRONT	REAR		
	ENGINE BRAKE TYPE	ENGINE BRAKE	0	0	
	CRUISE CONTROL	CRUISE CONTROL	0	0	
S	ALTERNATOR	DELCO 12V 160A (28SI) BRUSH-TYPE	0	0	
	BATTERY DISCONNECT SWITCH	BATTERY DISCONNECT SWITCH	5	0	
S	STARTER MOTOR	12 VOLT MELCO STARTER (MITSUBISHI ELECTRIC)	0	0	
	ENGINE BLOCK HEATER	120 VOLT / 0.75 KW, ENGINE BLOCK HEATER	3	0	
	POWER TAKE OFF CONTROL	POWER TAKE OFF TRANSMISSION CONTROL, PREP KIT F/SINGLE PTO	0	0	

			WEIGHT (LB)		
AXLE & SUSPENSION	DESCRIPTION	FRONT	REAR		
S	FRONT AXLE	10,000LB MERITOR MFS+ 4500 KG	1,156	0	

# TECHNICAL SPECIFICATION (cont.)



AXLE & SUSPENSION	DESCRIPTION	WEIGHT (LB)		
		FRONT	REAR	
S	SPRINGS - FRONT	MACK TAPERLEAF 10000# (4500 KG) GROUND LOAD RATING	0	0
S	FRONT AXLE BRAKES	MERITOR "S" CAM TYPE 16.5" x 5" Q+	0	0
	REAR AXLE - SINGLE	21000# (9525 kg) MERITOR MS-21-14X, (W/ DIFF LOCK) CASING 11.0mm	0	1,189
	REAR SUSPENSION - SINGLE	AL210 AIR-MACK 21000LB 9525KG	0	424
	SUSPENSION LEVELLING DEVICE (CA in PC29 only)	SUSPENSION LEVELLING AIR DUMP	0	0
S	BRAKES - REAR	MERITOR "S" CAM 16.5"x7" Q+	0	0
S	REAR AXLE RATIO	RATIO 5.57, REAR AXLE	0	0

CHASSIS EQUIPMENT	DESCRIPTION	WEIGHT (LB)		
		FRONT	REAR	
	DPF DIESEL PARTICULATE FILTER	CUMMINS SINGLE MODULE E.A.T.S. RH SIDE UNDER CAB US17 (7L over 271HP only!!)	64	98
S	EXHAUST	UNDERFRAME RIGHT SIDE INBOARD MOUNTED (Diesel engines only)	0	0

FRAME EQUIPMENT & FUEL TANKS	DESCRIPTION	WEIGHT (LB)		
		FRONT	REAR	
	WHEELBASE	150" Wheelbase (87" CA) 50" After-frame	322	419
S	FRAME RAILS	STEEL - 260MM X 70MM X 7MM - (10.24" X 2.75" X 0.275" ); RBM 1,258,000 LB-IN	0	0
	PRIMARY FUEL FILTER	FUEL FILTER, WATER SEPARATOR, FUEL EL.HEATER, GENERIC (Diesel engines only)	7	0
S	FUEL TANK - LH	50 GALLON (190 L) 22" ALUMINUM ROUND	115	56

CAB INTERIOR	DESCRIPTION	WEIGHT (LB)		
		FRONT	REAR	
S	SPEEDOMETER -& GAUGES - UNIT(S) OF MEASURE	U.S. UNITS (PREDOMINANT)	0	0
	BACK-UP ALARM	BACK-UP ALARM	0	0
S	AIR RESTRICTION INDICATOR	MECHANICAL, GRADUATED, ON FILTER	0	0
S	DAYTIME RUNNING LIGHTS	DRL WHEN ENGINE RUNNING & PARK BRAKE OFF	0	0
S	FIRE EXTINGUISHER	HAND FIRE EXTINGUISHER 1.1 KG (2.5LB) ENGLISH DECAL, ABC	0	0
S	AUDIO SYSTEM	RADIO, AM/FM, MP3, WEATHER BAND	0	0
S	AUDIO INTEGRAT. PHONE HANDSFRE	AUDIO INTEGRATED HANDSFREE PHONE, BLUETOOTH	0	0
S	AUDIO COMMUNICATION CONNECTOR	AUDIO COMMUNICATION CONNECTOR, USB AUDIO	0	0
S	COMMUNICATION EQUIPMENT	FACTORY INSTALLED GEOTAB FLEET MANAGEMENT SYSTEM	0	0
S	DRIVER SEAT	MACK DRIVERS SEAT, AIR SUSPENDED	0	0
S	DRIVERS SEAT UPHOLSTERY	DRIVERS SEAT UPHOLSTERY, VINYL	0	0
S	PASSENGER SEAT	FIXED PASSENGER SEAT	29	0
S	PASSENGERS SEAT UPHOLSTRY	PASSENGERS SEAT UPHOLSTERY, VINYL	0	0
S	SEAT BELT(S)	ALL SEAT BELTS, BLACK	0	0

CAB EXTERIOR	DESCRIPTION	WEIGHT (LB)		
		FRONT	REAR	
	HOOD RADIATOR GRILLE, FINISH	HOOD RADIATOR GRILLE FINISH, BRIGHT CHROME	0	0

# TECHNICAL SPECIFICATION (cont.)



CAB EXTERIOR	DESCRIPTION	WEIGHT (LB)	
		FRONT	REAR
FRONT BUMPER FINISH	FRONT BUMPER FINISH BRIGHT	0	0
MIRRORS - EXTERIOR	HEATED AND MOTORIZED MIRRORS BOTH SIDES, CHROME (Bulldog mirror)	31	0

WHEELS & TIRES	DESCRIPTION	WEIGHT (LB)	
		FRONT	REAR
TIRES BRAND/TYPE - FRONT	11R22.5 H BRIDGESTONE R268 ECOPIA (13220 lbs) (Total for QTY = 2)	247	0
WHEELS - FRONT	22.5x8.25 ACCURIDE, 43644x POLISHED ALUMINUM DISC (Total for QTY = 2)	80	0
FRONT AXLE TIRE & WHEEL QUANTITY	TWO FRONT TIRES & WHEELS	0	0
TIRES BRAND/TYPE - REAR	11R22.5 G BRIDGESTONE M760 ECOPIA (23360 lbs) (DRIVE ONLY) (Total for QTY = 4)	0	538
WHEELS - REAR	22.5x8.25 ACCURIDE, 43644x POLISHED ALUMINUM DISC (Total for QTY = 4)	0	159
REAR AXLE TIRE & WHEEL QUANTITY	FOUR REAR AXLE TIRES & WHEELS	0	0

PAINT	DESCRIPTION	WEIGHT (LB)	
		FRONT	REAR
S PAINT COLOR - FIRST COLOR	GLACIER WHITE; P3029	0	0

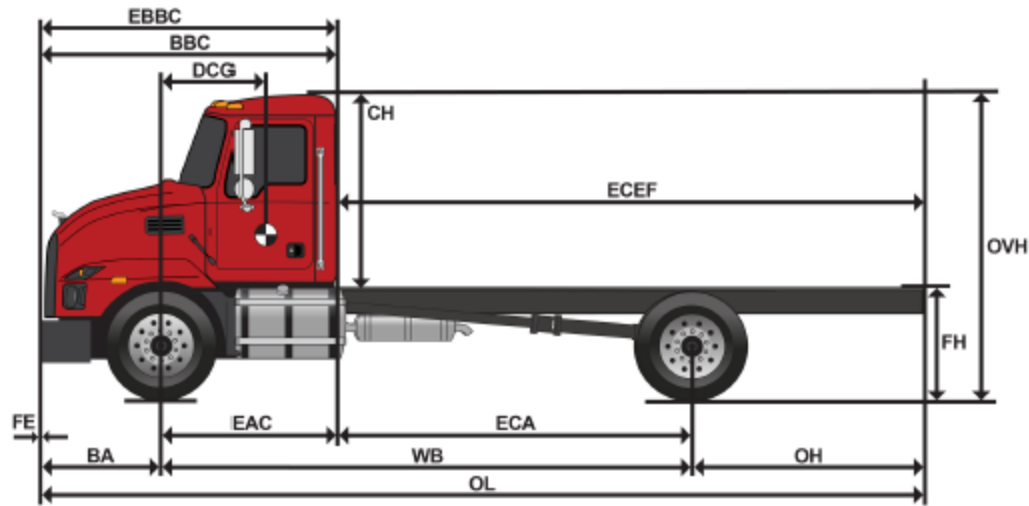
BASE WARRANTY & PURCHASED COVERAGES	DESCRIPTION	WEIGHT (LB)	
		FRONT	REAR
S ENGINE TOWING WARRANTY	CUMMINS ENGINES (Contact Cummins for Standard Warranty and Extended Coverage Details)	0	0
MACK ONECALL BUNDLE	12 MONTH - ASIST AND MACK ONECALL	0	0
S VEHICLE WARRANTY TYPE	NORMAL DUTY WARRANTY CLASSIFICATION	0	0
S BASIC CHASSIS COVERAGE	CHASSIS PLAN 24 MO/UNLIMITED MI NORMAL DUTY PROTECTION PLAN	0	0
S ENGINE WARRANTY	CUMMINS ENGINES B6.7 (Contact Cummins for Standard Warranty and Extended Coverage Details)	0	0
S EMISSION COMPONENT COVERAGE	CUMMINS ENGINES (Contact Cummins for Standard Warranty and Extended Coverage Details)	0	0
S TRANSMISSION WARRANTY	ALLISON TRANSMISSIONS (Contact Allison Transmission for standard warranty and extended coverage data)	0	0
S AIR CONDITIONING WARRANTY	AIR CONDITIONING STANDARD COVERAGE (Sealed System Only) 24 MONTHS UNLIMITED MILEAGE	0	0
CHASSIS TOWING WARRANTY	CHASSIS TOWING 24 MO/200K MILES	0	0
PARTNERED SERVICES	GEOTAB FOR MACK TRUCKS - 12 MONTH	0	0

SERVICES	DESCRIPTION	WEIGHT (LB)	
		FRONT	REAR
S MACK ONECALL AND ASIST	MACK ONECALL AND ASIST - 12 MONTH	0	0

<b>FRONT / REAR AXLE WEIGHTS (LB)</b>	6054	3482
<b>TOTAL WEIGHT (LB)</b>	9535	

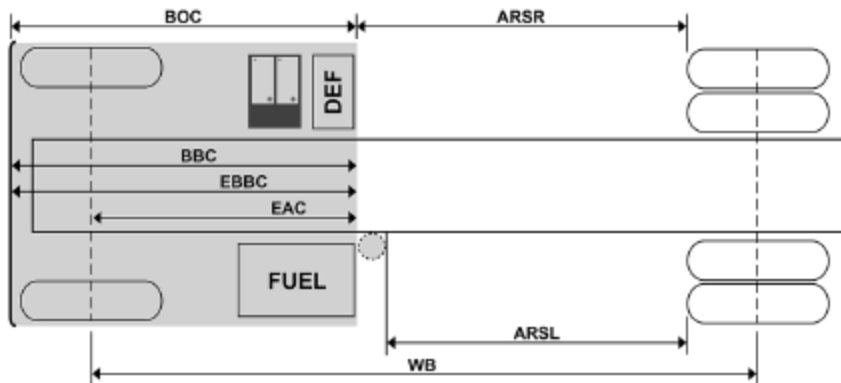


VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Description	Sales Code	Dwg Ref	Length	UOM
Front Frame Extension	N/A	FE	0.0	INCHES
Bumper to Front Axle	N/A	BA	40.0	INCHES
Eff. Bumper to Front Axle	N/A	N/A	40.0	INCHES
Wheelbase	N/A	WB	150.2	INCHES
Rear Overhang	N/A	OH	50.0	INCHES
Overall Length	N/A	OL	240.2	INCHES
Bumper to Back of Cab	N/A	BBC	103.0	INCHES
Eff. Bumper to Back of Cab	N/A	EBBC	103.0	INCHES
Eff. Cab to Rear Axle	N/A	ECA	87.2	INCHES
Eff. Front Axle to Back of Cab	N/A	EAC	63.0	INCHES
Eff. Cab to End of Frame	N/A	ECEF	137.2	INCHES
Unladen Frame Height	N/A	FH	40.6	INCHES
Cab Height	N/A	CH	69.1	INCHES
Overall Height	N/A	OVH	109.7	INCHES
Driver CG	N/A	DCG	59.1	INCHES





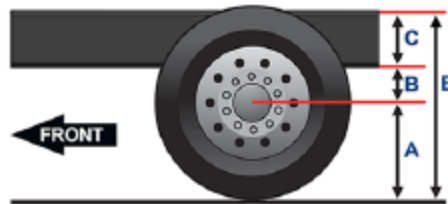
VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Description	Sales Code	Dwg Ref	Left Value(in)	Right Value(in)
Wheelbase	N/A	WB	150.2	150.2
Available Rail Space Right	N/A	ARSR	N/A	68.1
Available Rail Space Left	N/A	ARSL	58.1	N/A
Eff. Front Axle to Back of Cab	N/A	REF	63.0	63.0
Front Axle To Fender	001AA3	N/A	30.0	30.0
Battery Box	001AA3	N/A	0.0	25.0
50 GALLON (190 L) 22" ALUMINUM ROUND / TRUCK	288AC2 / 001AA3	N/A	41.0	0.0
Ad-Blue Tank	001AA3	N/A	0.0	6.0
Drive Tire Radius	901090	N/A	21.1	21.1



Top View image is intended for illustration purposes only and is not presented to scale. Wheelbase, Axle Spacing and After frame are not shown as specified, but are a representation. Customer Adaptation (CA) options and relocated components are not represented in these images. Most CA options impact the variation of the image, thus an image may not populate. Calculations are approximate to a tolerance of  $\pm 4$  inches due to component mounting variation. Certain chassis component options are NOT represented in the Top View image, such as, but not exclusive to, Front Frame Extensions, Fuel Water Separators, Air Dryers, PTOs, Fifth Wheels, Chassis Fairings, Toolboxes, Trailer Connections. For further information on these items and their respective locations on your specification, please refer to the data sheets associated with those items in the configurator.

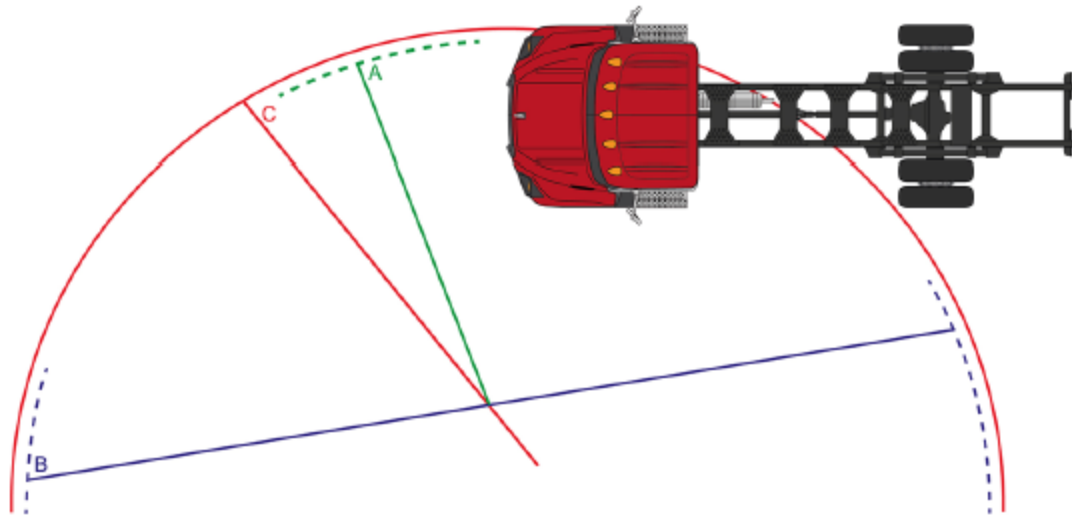


VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY					
Description	Sales Code	Dwg Ref	Rear		
			Unladen	Laden	UOM
Tire Radius	901090	A	21.1	19.6	INCHES
Suspension Height	260AS0	B	9.3	9.2	INCHES
Frame Depth	YBXD1X	C	10.2	10.2	INCHES
Total Height	N/A	E	40.6	39.0	INCHES





VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Description	Sales Code	Dwg Ref	Length	UOM
SAE Turning Radius	N/A	A*	22.7	FEET
Adjusted Turning Radius	N/A	A	22.7	FEET
Curb-to-Curb Diameter	N/A	B	46.4	FEET
Wall-to-Wall Diameter	N/A	C	54.6	FEET



Tests have shown that the true location of the turning center is further to the rear than midway between drive axle sets (where applicable)

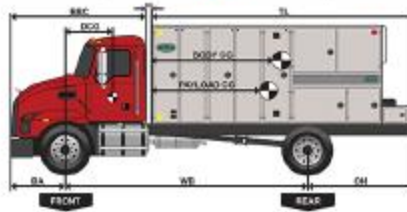
The actual location of the turning center depends on:

- Whether the drive tire equipment is single or dual.
- The overall load distribution for the vehicle (front/rear, between drive axles) in a loaded condition
- Manufacturing tolerances within the steering components



Inputs Required	DWGRel	Inputs	UOM
Driver(s) & Equipment Weight		201	LB
Total Body Length	TL	16.4	FEET
Body Tare Weight		3501	LB
Front of Body to Body CG	BODY CG	96.0	INCHES
Additional Clearance from Back of Exhaust to Front of Body	BC	6.0	INCHES

VEHICLE SPECIFICATION SUMMARY				
Description	Description	Dwg Ref	Length	UOM
Bumper to Front Axle	N/A	BA	40.0	INCHES
Wheelbase	N/A	WB	150.2	INCHES
Rear Overhang	N/A	OH	50.0	INCHES
Bumper to Back of Cab	N/A	BBC	103.0	INCHES
BOC Exhaust Space	130AA9	N/A	0.0	INCHES
Driver CG from Front Axle	N/A	DCG	59.1	INCHES



CALCULATED PERFORMANCE SUMMARY				
Tare Weights	Front Axle	Rear Axle (s)	Total	UOM
Chassis	6054	3482	9535	LB
Driver(s) & Equipment Weight	122	79	201	LB
Fuel	302	40	342	LB
Body/Trailer	-346	3648	3501	LB
Total Tare	6132	7447	13579	LB
Payloads				
First Body Payload	-1227	13645	12417	LB
Total - Lift Axles Down	4904	21092	25995	LB
GAWR	10000	15996	25995	LB





VEHICLE SPECIFICATION/CALCULATED PERFORMANCE SUMMARY				
Sub-Category	Sales Code	Sales Code Description	Value	UOM
Front Axle	2400R0	10,000LB MERITOR MFS+ 4500 KG	10000	LB
Front Suspension	2440B4	MACK TAPERLEAF 10000# (4500 KG) GROUND LOAD RATING	10000	LB
Front Tires	900AT0	11R22.5 H BRIDGESTONE R266 ECOPIA (13220 lbe)	13220	LB
Front Wheels	5310Z1	22.5x8.25 ACCURIDE, 43644x POLISHED ALUMINUM DISC	14800	LB
<b>Front GAWR</b>			<b>10000</b>	<b>LB</b>
Rear Axle	2520O2	21000# (9525 kg) MERITOR MS-21-14X, (W/ DIFF LOCK) CASING 11.0mm	21000	LB
Rear Suspension	260AS0	AL210 AIR-MACK 21000LB 9525KG	21000	LB
Rear Tires	901090	11R22.5 G BRIDGESTONE M760 ECOPIA (23360 lbe) (DRIVE ONLY)	23369	LB
Rear Wheels	346186	22.5x8.25 ACCURIDE, 43644x POLISHED ALUMINUM DISC	29600	LB
<b>Rear GAWR</b>			<b>21000</b>	<b>LB</b>
<b>Truck GVWR</b>			<b>25995</b>	<b>LB</b>
<b>Gross Combination Weight Rating</b>			<b>0</b>	<b>LB</b>
<b>Tax Value GVWR (USA FET Only)</b>			<b>31000</b>	<b>LB</b>