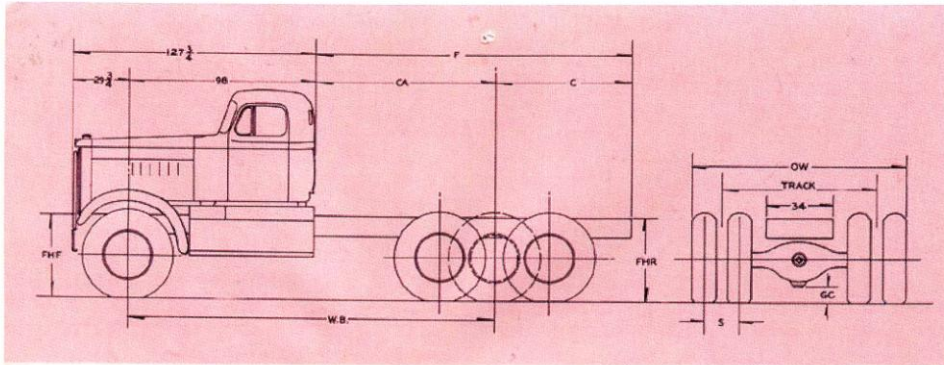


## DIAMOND T 950 and 951 SERIES

### A Choice of Five Diesel Engines

	Model 950	Model 950S	Model 950RS	Model 951	Model 951S
Make.....	Cummins	Cummins	Cummins	Buda	Buda
Model.....	NHB-600	NHBS-600	NHRBS-600	6-DA-844	6-DAS-844
Bore and Stroke.....	5¼x6	5¼x6	5¼x6	5¼x6½	5¼x6½
Piston Displacement.....	743 cu. in.	743 cu. in.	743 cu. in.	844 cu. in.	844 cu. in.
Max. Torque.....	537 lbs. ft.	710 lbs. ft.	800 lbs. ft.	645 lbs. ft.	785 lbs. ft.
Brake H.P.....	200 @	275 @	300 @	215 @	280 @
at Gov. Speed of.....	2100 r.p.m.	2100 r.p.m.	2100 r.p.m.	2100 r.p.m.	2100 r.p.m.
Crankshaft size.....	4½"	4½"	4½"	3¾"	3¾"
No. of Bearings.....	7	7	7	7	7
Supercharger.....	No	Yes	Yes	No	Yes
Vibration Damper.....	Yes	Yes	Yes	Yes	Yes
Oil-cooler.....	Standard	Standard	Standard	Standard	Standard



**CHASSIS DIMENSIONS ALL MODELS 950-951 SERIES**

WHEEL-BASES	CA	C	TURNING RADIUS		Axle	TRACK			OVERALL WIDTH REAR (OW)		
			Right	Left		10.00 Tires	11.00 Tires	12.00 Tires	10.00 Tires	11.00 Tires	12.00 Tires
170	72	60	26 ft.	30 ft.	U-200	71 3/8	71 3/8	....	95 3/8	95 3/8	.....
182	84	66	28 ft.	32 ft.	36M	71 3/8	71 3/8	....	95 3/8	95 3/8	.....
194	96	72	30 ft.	34 ft.	SW-3456	72 1/4	72 1/4	....	95 13/16	96 1/4	.....
206	108	84	32 ft.	36 1/2 ft.	SW-3458	72 1/4	72 1/4	....	95 13/16	96 1/4	.....
224	126	102	34 1/2 ft.	39 1/2 ft.	SW-456	72 1/4	72 1/4	....	95 13/16	96 1/4	.....
242	144	120	37 ft.	43 ft.	SFD-4600	72 1/4	72 1/4	74 1/8	95 13/16	96 1/4	100 3/4

TIRE SIZE	Ply Rating	Rated Capacity	Rim Width	Frame Height, Loaded of Front Axle (FHF)	Frame Height Loaded, at Rear Axle or Tandem (FHR)					Ground Clearance (GC) All Rear Axles
					U-200	36M	SW-3456-8	SW456	SFD4600	
10.00-20	12	4000	7.5	37	38 7/8	37	38 1/4	39 11/16	39 11/16	9 5/8
10.00-22	12	4275	7.5	38	39 7/8	38	39 1/4	40 11/16	40 11/16	10 5/8
11.00-20	12	4500	7.5	37 1/2	39 3/8	37 1/2	38 3/4	40 3/16	40 3/16	10 1/4
11.00-22	12	4750	7.5	38 1/2	40 3/8	38 1/2	39 3/4	41 3/16	41 3/16	11 1/4
11.00-24	12	5000	7.5	39 1/2	41 3/8	....	40 3/4	42 3/16	42 3/16	12 1/4
12.00-24	16	7140	8.5	40 1/4	....	....	....	45 3/8	....	13

**NOTES:** All dimensions inches except turning radius. Minimum wheelbase of six-wheelers is 194". All dimensions SFD-4600 same as SFD-4600. Frame length back of rear axle (C of first table) can be reduced. Turning radius approximate; varies to some extent with size of tires. Dimension S is 14 1/2" for 12.00-24 tires, and 12 3/4" for all other sizes.

**GROSS VEHICLE WEIGHT RATINGS**

	PREFERRED SERVICE	MODERATE SERVICE	SEVERE SERVICE	TRACTOR SERVICE
With U-Series Axles.....	36,000 lbs.	32,500 lbs.	30,000 lbs.	30,000 lbs.
With 36 M Tandem.....	47,000 lbs.	45,000 lbs.	40,000 lbs.	40,000 lbs.
With SW 3456 Tandem.....	47,000 lbs.	45,000 lbs.	....	40,000 lbs.
With SW 3458 Tandem.....	....	....	....	36,000 lbs.
With SW 456 Tandem.....	60,000 lbs.	55,000 lbs.	50,000 lbs.	50,000 lbs.
With SFD or SFD4600.....	65,000 lbs.	60,000 lbs.	55,000 lbs.	50,000 lbs.

Gross Combination Weight Rating is 65,000 lbs. with single rear axle and 76,000 lbs. for six-wheelers.

**DIAMOND T MOTOR CAR COMPANY — CHICAGO**

(All Specifications Subject to Change Without Notice)

**BRAKES, SERVICE**.....Westinghouse Air Compressor Size.....12 cu. ft. Air-tanks, No. and Capacity.....2—2480 cu. in. Air-tanks, Six-Wheelers.....2—3000 cu. in. Adjustment, front, FE-900 axle.....Eccentric anchor pin Adjustment, front, FE-15 axle.....Slack Adjusters Lining thickness.....FE-900,  $\frac{3}{8}$ " FE-15,  $\frac{1}{2}$ " Lining thickness, rear..... $\frac{3}{4}$ "

**Brake Sizes and Lining Area**

Axle or Tandem	Brake Size	Lining Area
FE-900.....	16 $\frac{1}{2}$ x3	186 sq. in.
FE-15.....	17 $\frac{1}{2}$ x4	250 sq. in.
FE-18.....	Standard without brakes	
U-200.....	16 $\frac{1}{2}$ x7	436 sq. in.
36M.....	16 $\frac{1}{2}$ x7	952 sq. in.
SW-3456-8.....	16 $\frac{1}{2}$ x6	736 sq. in.
SW-456.....	16 $\frac{1}{2}$ x7	872 sq. in.
SFD-4600.....	18x7	912 sq. in.
SFDD-4600.....	18x7	912 sq. in.

**BRAKE, HAND**.....16" Tru-Stop, 4-shoes Type.....Ventilated Steel Disc Location.....Rear of Transmission Lining Thickness..... $\frac{3}{4}$ " Lining Area.....122 sq. in.

**CLUTCH, Models 950 and 951**.....Spicer 14" Type.....Two-plate, multiple-lever Diameter and area.....13 $\frac{1}{4}$ "—423 sq. in.

**CLUTCH, Models 950S, 950RS and 951S**.....Spicer 15 $\frac{1}{2}$ " Type.....Two-plate, multiple-lever Diameter and area.....15 $\frac{1}{4}$ "—484 sq. in.

**COOLING SYSTEM**.....Capacity 19 gallons Radiator Type.....Tube-and-fin, cast tanks Core Thickness......3" Core Frontal Area.....1220 sq. in. Mounting.....Spring and Cushion Pressure Cap.....5 lbs. Fan.....24" Six-blade Radiator Shutters.....Kysor automatic, air-operated

**ELECTRICAL SYSTEM** Type.....12-24 volt, with series-parallel switch Generator.....Delco-Remy, 12-volt, 50-ampere Starter.....Delco-Remy 24-volt Batteries.....Four 6-volt, S.A.E. Specification 5 Rated Capacity.....168 ampere-hours each Circuit Protection.....Manually reset circuit-breakers

**FRAME**.....Straight Channel Material.....Manganese steel, heat treated Section.....10 $\frac{1}{2}$ "x3 $\frac{1}{2}$ "x5 16" Section Modulus (2 rails).....28.28 Rear Inner-Liners.....Std. on six-wheelers Full-length Inner-Liners.....Optional Fish-plates (15"x $\frac{3}{4}$ ").....Optional

**FUEL TANKS**.....Two, welded steel Total Capacity.....96 gallons Location.....Under step-board shields

**SHOCK ABSORBERS, Front**.....Standard Make.....Houdaille Type.....Hydraulic, double-acting

**SPRINGS, Front** Type.....Semi-elliptic Dimensions.....52"x3" Design.....9 leaves, 3.61" depth Material.....Silico-Manganese steel Shackles-bushings.....Bronze

**SPRINGS, Rear** Type.....Semi-elliptic with helper Dimensions.....56"x3 $\frac{1}{2}$ " Design.....17 leaves, 7.43" depth Helper.....7 leaves, 2.37" depth Material.....Silico-Manganese steel Shackles.....None—surface contact with frame brackets —no lubrication Drive and Torque.....Radius Rods

**SPRINGS, Six-Wheelers**.....Vary with tandem

**STEERING GEAR** Make and Model.....Ross TA71 Type.....Cam and Twin-lever Reduction ratios.....27:23:27 Steering wheel size.....22"

**TIRES** Standard.....9.00-20, duals rear Optional sizes.....to 11.00-22\* Special option.....12.00-24\*\*  
\*11.00 tires on Timken tandems exceed 96" overall width.  
\*\*Requires FE-18 front axle and SFD4600 tandem.

**UNIVERSAL JOINTS**.....Spicer Size and Type.....1700 and 1800, needle-bearing

**VEHICLE SPEEDS** Road Speeds in Overdrive with 10.00-22 Tires: at governed engine speed (2100 r.p.m.)

	10 Sp.	10 Sp.	5 Sp.	5 Sp.	Aux.		Aux.	
	108H170	8950C	825I	825IA	803IC	803IG	825IA-8255A	8035G & 803IG-8035G
5.75.....	58	66	57	60	54	68		
5.91.....	57	64	55	59	52	61		
6.16.....	66	54	61	55	56	63		
6.42.....	64	52	59	51	54	61		
6.51.....	63	51	58	50	53	60		
6.8.....	60	49	56	48	51	57		
6.94.....	59	48	54	47	50	56		
7.21.....	57	46	52	45	48	54		
7.62.....	54	44	50	43	46	51		
7.79.....	53	43	48	42	45	50		
8.04.....	51	42	47	41	43	49		
8.2.....	50	41	46	40	42	48		
8.38.....	49	40	45	39	41	47		
9.02.....	45	..	42	36	38	43		
9.2.....	45	..	41	36	38	42		

**WHEELS** Standard.....10-stud Budd disc NAX and aluminum Budd wheels optional, saving approximately 20 lbs. and 35 lbs. per wheel respectively. For 12.00-24 tires, wheels have large 1 $\frac{3}{8}$ " bolt circle and 8.5" rim.

**CAB**.....Diamond T "Full-Vision" Overall width.....69" Construction.....All-steel, welded, insulated Windshield.....One-piece "Solex" safety plate Seats.....Foam rubber, adjustable Equipment.....Deluxe, including instrument panel, glove compartment, rubber-cushioned arm-rest, dome-light, insulated floor mat, aluminum kick plates on doors, rear-view mirror, two sun visors, two windshield wipers, cigar lighter, ash tray.

**EQUIPMENT** Fuel filter, 3 qt. oil-bath air-cleaner, externally mounted, two oil-filters including externally mounted Lubefiner. Five-piece, pressed steel hood with ventilating louvers. Quick-detachable fenders. Deep flanged running boards of non-slip tread plate. Sealed-beam headlamps with foot control. Treadle type foot accelerator, rubber cushioned. Starter button in instrument panel. Engine oil temperature gage. Muffler and guard. Channel bar bumper. Two towing eyes and pins front.  
Ammeter.....Fuel and Oil Gauges.....Stop-light  
Speedometer.....Temperature Indicator.....Spare Wheel  
Parking Lights.....Cowl and Ventilator.....Twin Horns  
Tail-light.....12-Ton Hydraulic Jack.....Tools

## DIAMOND T 950, 950S, 950RS, 951, 951S

### AXLES, FRONT

Timken FE-900 Standard †; Shuler FE-15 and FE-18 optional

AXLE MODEL	†FE-900	FE-15	*FE-18
Rated Capacity (Preferred Service)	11,000	15,000	18,000
Bed Dimensions	4x3 3/4x1 7/8	4 3/4x3 1/2x5/8	4 3/4x3 1/2x5/8
King Pin Diameter	1 3/8	1 1/2	1 1/2
Spindle Bearing Seat:			
Diameter—Outer	2 3/4	2 3/4	3
—Inner	1 3/4	2 1/4	2 1/4
Cap. Wheel Bearings (Per Axle)	17,090	34,560	37,030
Track—Spoke Wheels, 7.5 rim	78 1/2	...	...
Track—Budd Wheels, 6 3/8 dish	77 1/2	77 1/2	...
7 1/4 dish	...	...	82 1/4

†Limited to highway service. \*Available only with 12.00-24 tires on Budd wheels.

### AXLE, REAR

Timken U-200

AXLE MODEL	U-200
Rated Capacity: (Preferred Service)	29,000
Type	Full-Float
Drive	Double Red.
Housing Type	Banjo
Housing Material	Malleable
Shaft Diameter at Splines	2 3/4
Capacity Wheel Bearings (per axle)	35,840
Ratios	5.91, 6.51, 7.21, 7.79

### AXLES, REAR—TANDEM (Six-wheelers)

TANDEM MAKE AND MODEL	Eaton †36M	Timken †SW3456	Timken †SW3458	Timken SW456	Timken SFD4600	Timken SFDD4600
Rated Capacity: (Preferred Service)	36,000	36,000	32,000	50,000	50,000	50,000
Housing	*Cast Steel	Cast Steel	Aluminum	Cast Steel	Cast Steel	Cast Steel
Drive	Bevel	Worm	Worm	Worm	Double Red.	Double Red.
3rd Differential	Yes	No	No	No	No	Yes
Shaft Diameter at Splines	2 3/4	2 1/4	2 1/4	2 1/2	2 1/2	2 1/2
Capacity Wheel Bearings (per bogie)	50,840	44,640	44,640	71,680	71,680	71,680
Ratios	5.75, 6.94	6.16, 7.6	6.16, 6.8	7.6, 8.2	9.02	9.02

\*Available also with aluminum housing and aluminum hubs with Budd wheels. Weight reduction 500 lbs. †These tandems limited to highway service only.

### MAIN TRANSMISSIONS

Fuller Ten-Speed 10B-1120 standard; Fuller Ten-Speed Road-Ranger R-950C optional, also Spicer 8200 Series five-speed with 8000 Series 3-speed auxiliary.

TRANSMISSION MODEL	10B-1120	R-950C	8251-8255		8251A-8255A	
Weight	960 lbs.	804 lbs.	614 lbs.	495 lbs.	614 lbs.	495 lbs.
Housing	Steel	Steel	Steel	Aluminum	Steel	Aluminum
Gear Type	Helical	Helical	Helical	Helical	Helical	Helical
Reductions: 1st	8.59	7.45	5.19	5.19	5.19	5.19
3rd	6.54	5.82	2.88	2.88	2.88	2.88
4th	4.04	4.49	1.72	1.72	1.72	1.72
5th	3.08	3.55	1.00	1.00	1.00	1.00
6th	2.31	2.76	.69	.69	.795	.795
7th	1.76	2.10	...	...	...	...
8th	1.31	1.64	...	...	...	...
9th	1.00	1.27	...	...	...	...
10th	.835	1.00	...	...	...	...
Reverse	.636	.78	...	...	...	...
Reverse	6.49	2.78	5.31	5.31	6.81	6.81
Reverse	8.52	9.89	...	...	...	...

### AUXILIARY TRANSMISSIONS

MODEL	8031C-8035C		8031G-8035G	
Weight	425 lbs.	345 lbs.	425 lbs.	345 lbs.
Housing	Steel	Aluminum	Steel	Aluminum
Gear Type	Helical	Helical	Helical	Helical
Overdrive Ratio	.75	.75	.84	.84
Underdrive Ratio	2.59	2.59	1.29	1.29