

Jeep

1977 Technical Service Manual



1977 Technical Service Manual

CJ-5/CJ-7 Cherokee Wagoneer Truck

Service Department

 **Jeep Corporation**

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GENERAL

Jeep Corporation, the world's most experienced manufacturer of 4-wheel drive vehicles, continues to refine its model lineup for 1977. Some of the major refinements include:

- New, optional manual or power disc brakes are available for CJ models.
- New, tilt steering column option is available for CJ models.
- Factory-installed air conditioning option is available for CJ models.
- Power front disc brakes are standard on all Cherokee, Wagoneer and Truck models.
- A 258 CID six-cylinder engine with a new 2-barrel carburetor and improved camshaft for increased power is standard on Cherokee and J-10 Truck models (except California).
- A hinged seat back is standard on all Truck models.
- GVW ratings are increased on J-20 Trucks.
- A high altitude compensation package has been developed to reduce emissions from CJ models operated above 4000 feet elevation.
- Catalytic converters are required on all 1977 Jeep vehicles built for sale in the state of California.

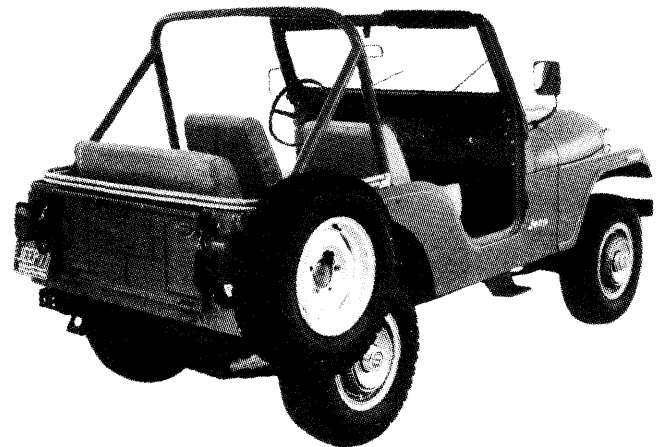
For 1977, a new model—the 4-door Cherokee, model 18—is introduced and the base model 14 Wagoneer has been dropped. The 1977 Jeep lineup remains at nine domestically available models. The 1977 models offered include two CJ models, three Cherokee models, one Wagoneer model, and three Truck models.

CJ MODELS

Two CJ models are available for 1977: the 83.5-inch wheelbase CJ-5, model 83, and the 93.5-inch wheelbase CJ-7, model 93. See figures A-1 and A-2. Beyond the 10-inch difference in wheelbase, CJ-5 and CJ-7 differ primarily in available options. CJ-7 models are available with an automatic transmission with Quadra-Trac full-time 4-wheel drive and a molded hardtop which are not available on CJ-5 models.

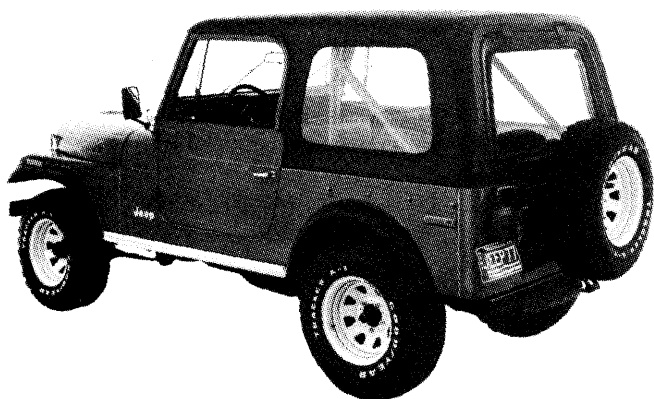
The Renegade Package continues to be offered on CJ models for 1977. It features new 9-inch by 15-inch tires mounted on new 8-inch by 15-inch styled, steel wheels along with unique exterior and interior trim.

Refer to the Power Train Combinations Chart in this section for engine and transmission availability.



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Fig. A-1 CJ-5 Model

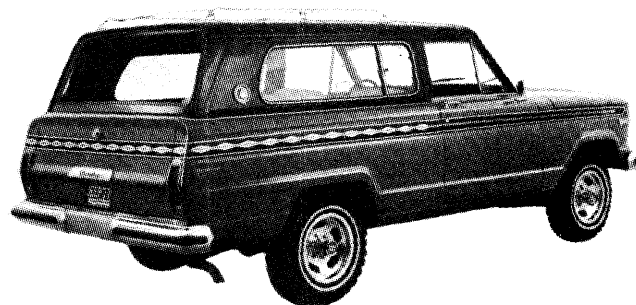
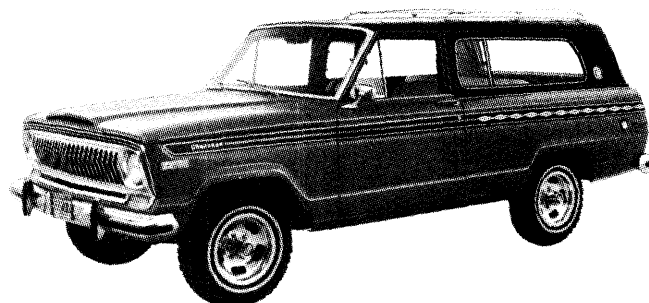


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Fig. A-2 CJ-7 Model

Both trim packages feature deluxe interior trim and carpeting, chrome bumpers, and unique exterior trim.

Refer to the Power Train Combinations Chart in this section for engine and transmission availability.



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Fig. A-3 Cherokee Model 16

CHEROKEE MODELS

For 1977, three Cherokee models are offered: the base 2-door model 16, the wide wheel model 17, and the new, 4-door model 18. See figures A-3, A-4, and A-5.

The 2-door model 16 is a dual purpose vehicle in the sports/utility class featuring an all-steel top, front disc brakes and fold-up rear seat as standard.

The wide wheel model 17 features steel, front and rear, wheel opening extensions to accommodate standard 10-inch by 15-inch tires mounted on 8-inch by 15-inch styled, steel wheels.

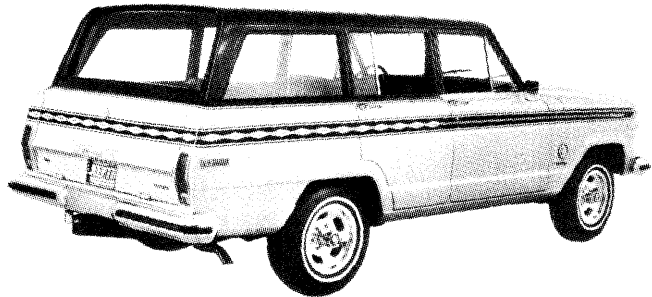
The new, 4-door model 18 features the convenience of rear doors in a station wagon-type vehicle. The model 18 has the same grille and taillamps as other Cherokee models.

Two trim packages are offered for 1977 Cherokee models. The 'S' package is available on all Cherokee models. The Chief package is available on the model 17.



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Fig. A-4 Cherokee Model 17



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Fig. A-5 Cherokee Model 18

WAGONEER MODEL

For 1977, one Wagoneer model is offered: the model 15. The 4-door Wagoneer station wagon features deluxe interior trim and carpeting, chrome bumpers, power steering, and automatic transmission with Quadra-Trac full-time 4-wheel drive as standard. See figure A-6.

Refer to the Power Train Combinations Chart in this section for engine availability.



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Fig. A-6 Wagoneer Model 15

TRUCK MODELS

Three Truck models are available in two series: the J-10 Series model 25 and model 45 and the J-20 Series model 46. See figures A-7 and A-8.

The J-10 differs from the J-20 Series in Gross Vehicle Weight (GVW) Ratings. For 1977, the J-10 Series GVW for models 25 and 45 remains 6025 while the J-20 model 46 has an increased standard GVW of 6800 and increased optional GVW ratings of 7600 and 8400.

Truck models are also identified by wheelbase. The model 25 has a 119-inch wheelbase; the model 45 and model 46 have a 131-inch wheelbase. The following chart outlines Truck differences by wheelbase and GVW rating.

Truck Model Identification

Series	Model Number	Wheelbase (Inches)	Gross Vehicle Weight Rating		
			Standard	Option 1	Option 2
J-10	25	119	6025	—	—
J-10	45	131	6025	—	—
J-20	46	131	6800	7600	8400

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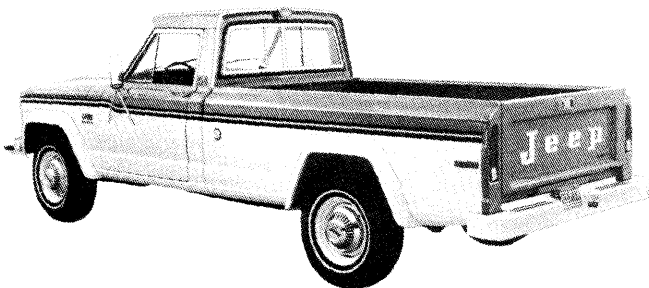
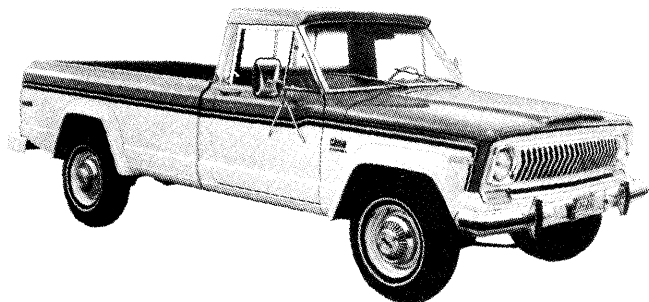


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Fig. A-7 J-10 Truck Model 25

Two trim packages are available on Truck models: Custom and Honcho. The Custom package is available on all Trucks and features deluxe interior and exterior trim. The Honcho package is only available on model 25 and features Levi interior, unique exterior trim, and 10-inch by 15-inch tires mounted on 8-inch by 15-inch styled, steel wheels.

Refer to the Power Train Combinations Chart in this section for engine and transmission availability.



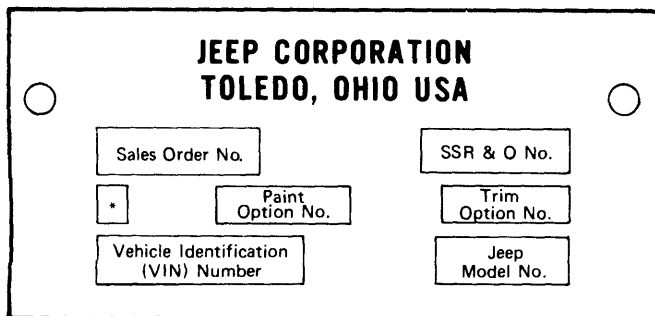
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Fig. A-8 J-20 Truck Model 46

VEHICLE IDENTIFICATION

Vehicle Identification Plate

A metal vehicle identification plate is affixed to the left-hand side of the dash panel under the hood (fig. A-9). The plate shows the Sales Order Number; the Vehicle Identification Number (VIN); Special Sales Request & Order (SSR&O) Number; Paint Option Number; Trim Option Number; and the Jeep Model Number.



*Disregard — for factory use only

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Fig. A-9 Vehicle Identification Plate

Vehicle Identification Number (VIN)

All VIN numbers contain 13 characters, a combination of letters and numbers that provide specific information about the vehicle. VIN's for all Jeep vehicles can be decoded using the following chart.

Special Sales Request and Order (SSR&O) Number

Certain Jeep vehicles are built to special order with other than standard parts or equipment. To assist the dealer in ordering correct replacement parts, an SSR&O number is assigned and a permanent record of the deviation is maintained by the factory. The SSR&O number is embossed on the Vehicle Identification Plate as shown in figure A-9.

Parts ordering procedure for SSR&O parts is detailed in the Jeep Parts Catalog.

Paint Option Number

The Paint Option Number is embossed on the Vehicle Identification Plate in the location shown in figure A-9.

Paint is not available from the factory. All colors shown below are available from Ditzler or Du Pont paint jobbers by requesting the paint intermix formula. Option No. 999 indicates special paint. To obtain information on special paint, contact your Jeep Parts Distribution Center and provide the Vehicle Identification Number (VIN).

Trim Option Number

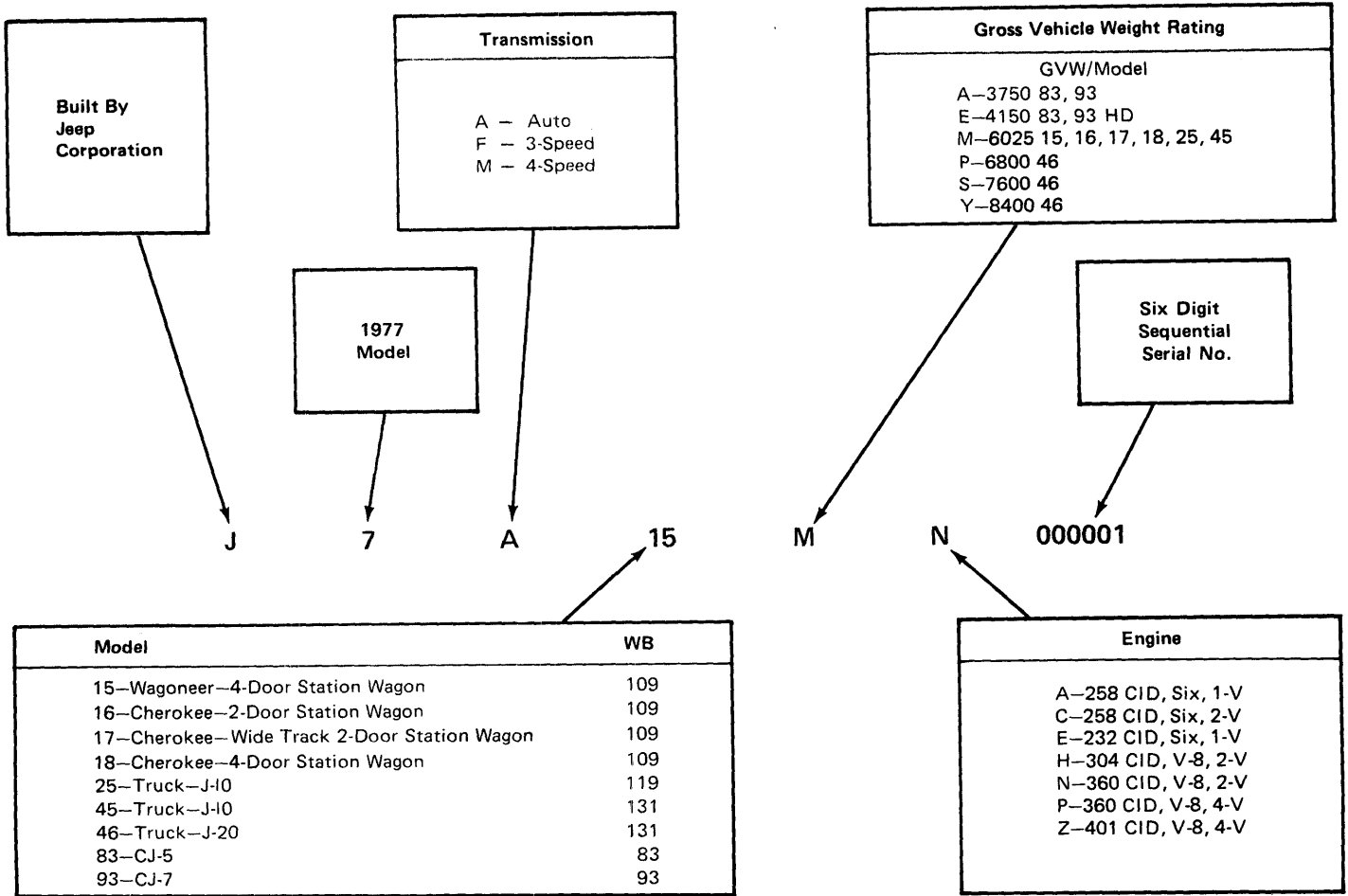
The Trim Option Number is embossed on the Vehicle Identification Plate as shown in figure A-9. Consult your Jeep Parts Catalogs for trim ordering procedure. Special trim is indicated by trim option number 999. To obtain information on special trim, contact your National Parts Distribution Center and provide the Vehicle Identification Number (VIN).

Safety Certification Sticker

A safety sticker is placed on all vehicles to show that they meet federal motor vehicle safety certification standards (fig. A-10). It lists the VIN, month and year built, Gross Vehicle Weight Rating (GVWR), and Gross Axle Weight Rating (GAWR).

The sticker is placed on the instrument panel on CJ-5 and CJ-7 models. On Cherokee, Wagoneer, and Truck models it is on the door lock pillar on the driver's side.

VIN Decoding Chart



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Paint Option Numbers

Paint Option Number	Color	Paint Option Number	Fleet Only Color
G7	Alpine White	FA	Transport Yellow
P1	Classic Black	FB	Omaha Orange
6D	Sand Tan	FC	Federal Gray
7L	Loden Green	FE	Forest Green
7K	Midnight Blue	FH	Olive Drab
7C	Autumn Red Met.		
6J	Pewter Metallic		
6V	Sunshine Yellow		
6P	Firecracker Red		
6R	Brilliant Blue		
7Y	Tawny Orange		
7B	Mocha Brown Met.		

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KEYS AND LOCKS

Two square-headed and two oval-headed keys are provided, as applicable, with each vehicle. The square-headed (code D) key operates the ignition switch, front door locks, and Wagoneer and Cherokee tailgates. The oval-headed (code E) key operates the glove box lock. Each key has a code number stamped on the knock-out

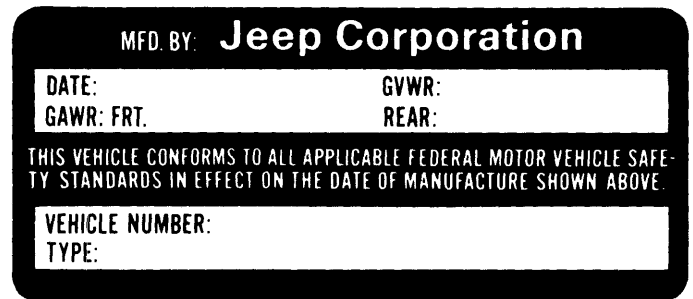


Fig. A-10 Safety Sticker

plug. In the event a key is lost, a new key can be made by converting the key code number to a key biting number. Key biting numbers can be obtained from a key cutting machine manufacturer's cross-reference list or by contacting your Zone office.

If a key is lost and the key code number is unknown, the correct number can be identified by the Zone office from the vehicle identification number.

If the ignition key is lost and the key code number is not available, a new key can be made by removing a door lock and taking it to a locksmith. The locksmith can determine the key biting by inserting a blank key into

the lock cylinder and cutting the blank to match the tumblers.

If the ignition switch lock is defective and the key is available, the cylinder and individual tumblers can be ordered and matched to the existing key. To determine the tumbler arrangement, place the key over the template (fig. A-11). Starting from the left, read across the horizontal lines and record first digit (number 1 position) of the key code. Continue this process for subsequent numbers 2 through 5.

NOTE: The template shown in figure A-11 may be used to determine the key biting code of a key for which the key code number is unknown.

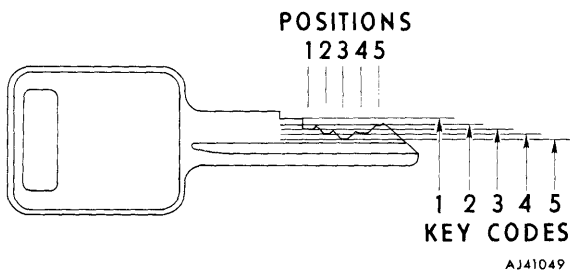


Fig. A-11 Key Coding Template

WARNINGS AND CAUTIONS

Detailed descriptions of standard workshop safety procedures are not included in this manual. This manual does contain WARNINGS for some service procedures that could cause personal injury, and CAUTIONS for some procedures that could damage the vehicle or its components. Please understand that these WARNINGS and CAUTIONS do not cover all conceivable ways service could be done or all possible hazardous consequences of each conceivable way. Anyone using service procedures or tools (whether or not recommended by Jeep Corporation) must satisfy himself that neither personal or vehicle safety will be jeopardized by the procedures or tools selected.

SPECIAL TOOLS

Special tools are required for some service operations. When such tools are required, reference is made in the service procedure to the tool name and number. In addition, all special tools are illustrated throughout the text, where possible, or at the end of the section in which they are referenced.

STANDARD TORQUE SPECIFICATIONS AND CAPSCREW MARKINGS

Torque specifications are listed at the end of each section where appropriate. All critical torque specifications are listed. Where no torque reference is given, refer to the Standard Torque Specifications and Capscrew Markings chart. Note that torque specifications

given in the chart are based on use of clean and dry threads. Reduce torque by 10 percent when threads are lubricated with engine oil and by 20 percent if new plated capscrews are used.

TORX-HEAD FASTENERS

Various sizes of internal and external hex-lobular (Torx) head fasteners are used as attaching hardware on numerous components and assemblies in the 1977 model Jeep vehicles. Due to the ever-changing usage and application of automotive fasteners, Torx-head fasteners may not be identified as such throughout the text. However, these fasteners may be removed and installed using Tool Set J-25359-02.

CONVERSION OF ENGLISH AND METRIC MEASURES

Cubic Centimetres to Inches: To change cubic centimetres to cubic inches, multiply cubic centimetres by 0.061 (cc x 0.061 equals cubic inch).

Cubic Inches to Centimetres: To change cubic inches to cubic centimetres, multiply cubic inches by 16.39 (cubic inch x 16.39 equals cc).

Litres to Cubic Inches: To change litres to cubic inches, multiply litres by 61.02 (litre x 61.02 equals cubic inches).

Cubic Inches to Litres: To change cubic inches to litres, multiply cubic inches by 0.01639 (cubic inches x 0.01639 equals litres).

Cubic Centimetres to Litres: To change centimetres to litres, divide by 1000 (simply move the decimal point three figures to the left).

Litres to Centimetres: To change litres to cubic centimetres, move the decimal point three figures to the right.

Miles to Kilometres: To change miles to kilometres, multiply miles by 1.609 (miles x 1.609 equals kilometres).

Kilometres to Miles: To change kilometres to miles, multiply kilometres by 0.6214 (kilometres x 0.6214 equals miles).




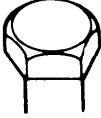



Pounds to Kilograms: 1 pound equals 0.4536 kg.

Kilograms to Pounds: 1 kg equals 2.2046 pounds.

SERVICE MANUAL IMPROVEMENTS

You are encouraged to report errors, omissions, or recommendations for improving this publication. A form provided for this purpose is included at the end of this section.

Standard Torque Specifications and Capscrew Markings

CAPSCREW HEAD MARKINGS	CAPSCREW BODY SIZE Inches - Thread	SAE GRADE 1 or 2 (Used Infrequently)		SAE GRADE 5 (Used Frequently)		SAE GRADE 6 or 7 (Used at Times)		SAE GRADE 8 (Used Frequently)	
		Torque		Torque		Torque		Torque	
		Ft-Lb	Nm	Ft-Lb	Nm	Ft-Lb	Nm	Ft-Lb	Nm
<p>Manufacturer's marks may vary. Three-line markings on heads shown below, for example, indicate SAE Grade 5.</p>       	1/4-20	5	6.7791	8	10.8465	10	13.5582	12	16.2698
	1/4-28	6	8.1349	10	13.5582			14	18.9815
	5/16-18	11	14.9140	17	23.0489	19	25.7605	24	32.5396
	5/16-24	13	17.6256	19	25.7605			27	36.6071
	3/8-16	18	24.4047	31	42.0304	34	46.0978	44	59.6560
	3/8-24	20	27.1164	35	47.4536			49	66.4351
	7/16-14	28	37.9629	49	66.4351	55	74.5700	70	94.9073
	7/16-20	30	40.6745	55	74.5700			78	105.7538
	1/2-13	39	52.8769	75	101.6863	85	115.2445	105	142.3609
	1/2-20	41	55.5885	85	115.2445			120	162.6960
	9/16-12	51	69.1467	110	149.1380	120	162.6960	155	210.1490
	9/16-18	55	74.5700	120	162.6960			170	230.4860
	5/8-11	83	112.5329	150	203.3700	167	226.4186	210	284.7180
	5/8-18	95	128.8027	170	230.4860			240	325.3920
	3/4-10	105	142.3609	270	366.0660	280	379.6240	375	508.4250
3/4-16	115	155.9170	295	399.9610			420	569.4360	
7/8-9	160	216.9280	395	535.5410	440	596.5520	605	820.2590	
7/8-14	175	237.2650	435	589.7730			675	915.1650	
1-8	235	318.6130	590	799.9220	660	894.8280	910	1233.7780	
1-14	250	338.9500	660	894.8280			990	1342.2420	

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Power Train Combinations—1977 Cherokee-Wagoneer-Truck Models

Series	Engine	Transmission		Transfer Case		Clutch (Inches)	Axle Ratio					Trac-Lok (4)	Axle Model		Brakes		Standard Wheels
		3(T15A)	4(T18)	A	20		QT	3.07	3.54	3.73	4.09		4.88	Front	Rear	Front	
Cherokee Models 16, 17 & 18 108.7 - Inch Wheelbase 6025 GVWR	6-258-2V (1)	S			S							O	Dana Open End	Dana	Delco 12 - Inch Disc	Delco 11x2 Drum	15 x 7.00 6 Bolt 5.50 B.C.
			O		S												
	360-2V (1)	S			S								O				
			O		S												
360-4V	S			S													
		O		S													
401-4V	S			S													
		O		S													
Wagoneer Model 15 109 - Inch Wheelbase 6025 GVWR	360-2V (1)			S		S	S	O					Dana Open End	Dana	Delco 12 - Inch Disc	Delco 11x2 Drum	15 x 7.00 6 Bolt 5.50 B.C.
	360-4V			S		S	S	O									
	401-4V			S		S	S	O									
J - 10 Truck Model 25 119 - Inch Wheelbase Model 45 131 - Inch Wheelbase 6025 GVWR	6-258-2V (1)	S			S							O	Dana Open End	Dana	Delco 12 - Inch Disc	Delco 11x2 Drum	15 x 7.00 6 Bolt 5.50 B.C.
			O		S												
	360-2V (1)	S			S								O				
			O		S												
360-4V	S			S													
		O		S													
401-4V	S			S													
		O		S													
J - 20 Truck Model 46 130.7 - Inch Wheelbase 6800 GVWR 7600 Opt. 8400 Opt.	360-2V (1)	S			S				S	O			Dana Open End	Dana FF	Delco 12.5 Inch Disc	Delco 12x 2.50 Drum	16.5 x 6 8 Bolt 6.50 B.C. (5)
			O		S												
	360-4V				O		S										
		S			S					S	O						
401-4V				S													

Notes:

- (1) NA California
- (2) 3.07 and 4.09 ratio NA on 16 & 18
- (3) 4.88 Ratio Available Trac-Lok Only
- (4) NA with Quadra - Trac

- (5) Wheel Standard 7200 GVW & 8000 GVW
- (6) Models 16 & 18 Only
- (7) Standard on Model 17
- (8) Optional on Model 17
- (9) 4.09 Axle Ratio Only

16.5 x 6.75
8 Bolt 6.50 B.C.

Abbreviations:

- B.C. - Bolt Circle
- GVWR - Gross Vehicle Weight Rating
- O - Optional Equipment
- QT - Quadra-Trac
- S - Standard Equipment

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Power Train Combinations—1977 CJ Models

Series	GVWR	Engine	Transmission			Transfer Case		Clutch (Inches)	Axle Ratio		Trac-Lok (5)	Axle Model		Brakes (Inches)		Standard Wheels
			3 T-150	4 T-18	A	20	QT.		3.54	4.09		Front	Rear	Front	Rear	
CJ-5 Model 83 83.5-Inch Wheelbase	Soft Top 3750	6-232 (4)	S					10.5	S(2)	O	O	Dana 30 Open End	AMC/ Jeep	Bendix 11.75- Inch Disc Opt.	Bendix 11 x 2 Drum	15 x 6 5 Bolt 5.50 B.C.
	Hard Top 4150 (1)	6-258-1V (3)	S			S										
		304-2V (6)	S													
CJ-7 Model 93 93.4-Inch Wheelbase	Soft Top 3750	6-232 (4)	S			S	10.5	S	O	O	Dana 30 Open End	AMC/ Jeep	Bendix 11.75- Inch Disc Opt.	Bendix 11 x 2 Drum	15 x 6 5 Bolt 5.50 B.C.	
	Hard Top 4150 (1)	6-258-1V (6)	S			S										
						O										S
		304-2V (6)	S			S										
					O	S										

Notes:

- (1) 4150 GVW Optional with Specific Suspension components-Mandatory GVW with full enclosures.
- (2) 4.09 Standard with Altitude Package

- (3) 4-Speed not available California.
- (4) Not available California.
- (5) Not available with Q.T.
- (6) Manual transmission not available in California with air conditioning.

Abbreviations:

- B.C. - Bolt Circle
- GVWR - Gross Vehicle Weight Rating
- O - Optional Equipment
- QT - Quadra-Trac
- S - Standard Equipment

General Dimensions (Inches)

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	CJ Models		Cherokee Models			Wagoneer Models	Truck Models		
	CJ-5	CJ-7	Model 16 2-Dr.	Model 17 2-Dr.	Model 18 4-Dr.	Model 15	J-10 Series		J-20 Series
							Model 25	Model 45	Model 46
Wheelbase	83.5	93.5	108.7	108.7	108.7	108.7	118.7	130.7	130.7
Overall Length	138.4	147.9	183.5	183.5	183.5	183.5	192.5	204.5	204.5
Overhang—Front	23.5	23.5	29.9	29.9	29.9	29.9	29.9	29.9	29.9
—Rear	31.4	30.9	44.9	44.9	44.9	44.9	43.9	43.9	43.9
Overall Width	68.6*	68.6*	75.6	78.9	75.6	75.6	78.9	78.9	78.9
Overall Height	—	—	66.7	67.6	66.7	66.7	69.3	69.1	70.7
Open Body	67.6	67.6	—	—	—	—	—	—	—
Soft Top	71.4	71.3	—	—	—	—	—	—	—
Hard Top	71.3	70.5	—	—	—	—	—	—	—
Step Height—Front	27.0	26.1	19.9	20.7	19.9	19.9	20.7	20.7	22.1
—Rear	—	—	—	—	20.8	20.8	—	—	—
Front Tread	51.5	51.5	59.4	65.4	59.4	59.4	63.3	63.3	64.6
Rear Tread	50.0	50.0	57.8	62.3	57.8	57.8	63.8	63.8	65.9
Minimum Ground Clearance	6.9	6.9	7.7	8.6	7.7	7.7	7.7	7.7	8.1
Minimum Turning Diameter	33.5	35.9	37.7	39.4	37.7	37.7	40.6	44.5	44.5
Effective Leg Room—Front (Accelerator)	37.9	39.1	39.4	39.4	39.4	38.8	38.8	38.8	38.8
—Rear (Minimum)	—	—	37.0	37.0	37.0	37.0	—	—	—
Hip Room — Front	55.4	53.8	60.5	60.5	60.5	60.5	60.5	60.5	60.5
—Rear	—	—	60.9	60.9	60.9	60.9	—	—	—
Shoulder Room — Front	55.4	58.3	58.3	58.3	58.3	58.3	58.3	58.3	58.3
—Rear	—	—	58.3	58.3	58.3	58.3	—	—	—
Effective Head Room — Front	—	—	38.0	38.0	38.0	38.0	40.2	40.2	40.2
Soft Top	39.8	40.6	—	—	—	—	—	—	—
Hard Top	40.8	39.9	—	—	—	—	—	—	—
—Rear	—	—	37.2	37.2	37.2	37.2	—	—	—
Cargo Floor Height	25.2	25.1	24.9	25.6	24.9	24.9	—	—	—
Cargo Capacity (Cubic Feet)	10.2**	13.6**	95.1**	95.1**	95.1**	95.1**	67.0	76.6	76.6
Cargo Space (Townside Truck Models)									
Overall Length	—	—	—	—	—	—	86.5	98.5	98.5
Length at Floor	40.2	46.8	81.6	81.6	81.6	81.6	83.6	95.6	95.6
Width at Wheelhouse	36.0	36.0	44.3	44.3	44.3	44.3	50.0	50.0	50.0
Width at Floor	36.0	36.0	60.9	60.9	60.9	60.9	68.0	68.0	68.0
Width of Tailgate Opening	35.8	34.5	54.9	54.9	54.9	54.9	57.2	57.2	57.2
Height of Sides and Tailgate	—	—	—	—	—	—	20.5	20.5	20.5

*With side mounted spare tire.

**With rear seat removed.

Metric System-SI

The International System of Units (Système International d'Unités) officially abbreviated "SI" in all languages – the modern metric system

QUANTITY	EXAMPLES OF APPLICATIONS	METRIC UNIT	SYMBOL
Length	Dimensions	metre	m
	Tire rolling circumference		
	Turning circle/radius		
Area	Braking distance		
	Greater than 999 metre	kilometre	km
	Dimensions	millimetre	mm
Volume	Depth of surface finish	micrometre	µm
	Glass & Fabrics	square centimetre	cm ²
	Brake & Clutch linings		
Volume Flow	Radiator area etc.		
	Small areas	square millimetre	mm ²
	Car Luggage Capacity	cubic metre	m ³
Time Interval	Engine Capacity	litre	l
	Vehicle fluid capacity	cubic centimetre	cm ³
	Gas & Liquid	litre per second	l/s
Velocity	Measurement of elapsed time	second	s
	General use	metre per second	m/s
	Road speed	kilometre per hour	km/h
Acceleration & Deceleration	General use	metre per second squared	m/s ²
	Frequency	hertz	Hz
	Electronics	kilohertz	kHz
Rotational Speed	General use	megahertz	MHz
	General use	revolution per minute	rpm
	General use	revolution per second	rps
Mass	Vehicle mass	megagram	t
	Legal load rating		
	General use	kilogram	kg
Density	Small masses	gram	g
	General use	milligram	mg
	General use	kilogram per cubic metre	kg/m ³
Force	gram per cubic centimetre		g/cm ³
	kilogram per litre		kg/l
	Pedal effort	newton	N
Moment of Force (Torque)	Clutch spring force		
	Handbrake lever effort etc.		
	Torque	newton metre	N-m
Power, Heat Flow Rate	General use	watt	W
	Bulbs	kilowatt	kW
	Alternator output		
Power, Heat Flow Rate	Engine performance		
	Starter performance		

QUANTITY	EXAMPLES OF APPLICATIONS	METRIC UNIT	SYMBOL
Celsius Temperature	General use	degree Celsius	°C
Thermodynamic Temperature	General use	kelvin	K
	General use	ampere	A
	General use	milliamper	mA
Electric Current	General use	microampere	µA
	General use	kilovolt	kV
	General use	volt	V
Potential Difference (Electromotive Force)	General use	millivolt	mV
	General use	microvolt	µV
	General use	megohm	MΩ
Electric Resistance	General use	kilohm	kΩ
	General use	ohm	Ω
	General use	farad	F
Electric Capacitance	General use	microfarad	µF
	General use	picofarad	pF
	Vehicle performance	litre per 100 kilometre	l/100 km
Fuel Consumption	Vehicle performance	litre per 1000 kilometre	l/1000 km
Oil Consumption	Vehicle performance	litre per 1000 kilometre	l/1000 km
Stiffness	Linear stiffness	kilonewton metre	kN/m
Tire Revolutions	Tire Data	revolution per kilometre	rev/km
Pressure	Tire	kilopascal	kPa
	Coolant		
	Lubricating oil		
Luminous Intensity	Fuel pump delivery		
	Engine compression		
	Manifold		
Accumulator Storage Rating	Brake line (hydraulic)		
	Car heating & ventilation		
	Barometric pressure		
Bulbs		candela	cd
Battery		ampere hour	A-h

U.S.A./METRIC COMPARISON			
QUANTITY	USA	METRIC – SYMBOL	
Length	Inch-Foot-Mile	Metre	m
Weight (mass)	Ounce-Pound	Kilogram	Kg
Area	Square inch/Foot	Square Metre	m ²
Volume-Dry	Cubic inch/Foot	Cubic Metre	m ³
	-Liquid	Litre	l
Velocity	Ounce-Pint-Quart-Gallon	Metre per Second	m/s
Road Speed	Feet Per Second	Kilometre per Hour	km/h
Force	Miles Per Hour	Newton	N
Torque	Pound-Force	Newton metre	N-m
Power	Foot-Pounds	Kilowatt	kW
Pressure	Horsepower	Kilopascal	kPa
Temperature	Pounds Per Square Inch	Degrees Kelvin	K
	Degrees Fahrenheit	and Celsius	°C

Decimal Equivalents (Chart)

FRACTIONS		DECIMALS		FRACTIONS		DECIMALS	
64ths	32nds	Two Place	Three Place	64ths	32nds	Two Place	Three Place
1		.02	.016	33		.52	.516
	1	.03	.031		17	.53	.531
3		.05	.047	35		.55	.547
	1/16	.06	.062		9/16	.56	.562
5		.08	.078	37		.58	.578
	3	.09	.094		19	.59	.594
7		.11	.109	39		.61	.609
	1/8	.12	.125		5/8	.62	.625
9		.14	.141	41		.64	.641
	5	.16	.156		21	.66	.656
11		.17	.172	43		.67	.672
	3/16	.19	.188		11/16	.69	.688
13		.20	.203	45		.70	.703
	7	.22	.219		23	.72	.719
15		.23	.234	47		.73	.734
	1/4	.25	.250		3/4	.75	.750
17		.27	.266	49		.77	.766
	9	.28	.281		25	.78	.781
19		.30	.297	51		.80	.797
	5/16	.31	.312		13/16	.81	.812
21		.33	.328	53		.83	.828
	11	.34	.344		27	.84	.844
23		.36	.359	55		.86	.859
	3/8	.38	.375		7/8	.88	.875
25		.39	.391	57		.89	.891
	13	.41	.406		29	.91	.906
27		.42	.422	59		.92	.922
	7/16	.44	.438		15/16	.94	.938
29		.45	.453	61		.95	.953
	15	.47	.469		31	.97	.969
31		.48	.484	63		.98	.984
	1/2	.50	.500		1	1.00	1.000