1974 JEEP CJ-5 304 V-8

From This……

To This……







NADA Guides Valuation: Link

Original MSRP:			$ 3,574.00		
Date:	Feb 12, 1012	Oct 1, 2013	Jan 10, 2015	Feb 5, 2016	Dec 15, 2017
Low Retail:	$ 5,300	$ 6,360	$ 5,820	$5,150	$6,875
Average Retail (a 20-footer):	$ 11,700	$ 14,760	$ 13,440	$12,250	$15,900
High Retail:	$ 16,300	$ 19,560	$ 18,000	$16,600	$21,600

Serial #: J4F835TH37056

Mileage:

At July 17, 2007 when previous owner transferred title:	47700 miles
Estimated by previous owner before new speedometer installed:	1000 miles
At August 7, 2007 as recorded by emission testing station:	*055 miles*
When Purchased – Feb 12, 2012:	1470 miles
Total (+- 10%):	**50170 miles**

Jeep Info: http://www.offroaders.com/tech/jeep/index.html

Maintenance:

Date	Mileage	Description	Part # / Type / Spec	Comments
Mar 5, 2012		Engine Oil Change	10W-30	
Mar 5, 2012		Replaced Air Cleaner	Fram CA136	
Mar 5, 2012		Replaced PCV valve		Old one appeared to be working OK.
Mar 11, 2012		Replaced Spark Plugs	Autolite AP65	#8 slightly fouled
Mar 11, 2012		Tune-up (timing, idle mixture)		
Nov 6, 2012		Engine Oil Change	10W-30	
Nov 12, 2012		Set idle mixture @ 15.0 – 15.2		Used air/fuel meter
Nov 12, 2012		Checked Timing - OK		
Nov 14, 2012		Oil Change and emissions testing		
Dec 10, 2012		Changed out Transmission and Transfer Case Gear Oil	Sta-Lube API, GL-4 Napa Part # SL24239	Old oil very dirty, small amount of sludge around magnetic drain plug. Suspect old oil may have been GL-5.
Dec 13, 2012		Replace Rear Differential cover plate and gasket. Refilled	Lucas 80W-90 heavy duty gear oil	Non synthetic
Jan 14, 2014		Oil Change and emissions testing		
Jan 30, 2014		Knucklebuster's work • Install rebuilt transfer case. • Install rebuilt transmission c/w twin stick conversion. • Install new clutch. • Replace rear seal. • Install heavy duty differential covers. • Install disc brakes on front axle c/w proportional valve. • Rebuild rear drum brakes		All fluids replaced. Rebuilt transmission (by Herm the Overdrive Guy) will not stay in first gear. Pops out when gas pedal let up. Needs to be returned for warranty. Transfer case will occasionally pop out of high range (rear). Researched this and found that this is common problem when going to twin stick conversion. Requires addition of heavier detent springs and spacers.
Dec 29, 2014		Mini Tune-up. Mixture set to 14.4. Oil Change & Emission Testing		Emission Test Pass, but idle Hydrocarbons were close to max allowable.

Date	Mileage	Description	Part # / Type / Spec	Comments
Jan 17, 2015		Desert Fab Motorsports work • Install replacement T-15 transmission received from Herm the Overdrive Guy (replaced first rebuilt unit that had bearing issue causing jump out of first gear) • Install heavier detents on D-20 transfer case which are required with dual stick upgrade. • Replace front and rear springs with new set from Superlift Springs. • Replace fluids – rear diff., transfer case and transmission.		This work corrected all problems with transmission and transfer case.
Nov 12, 2015		Oil Change & Fluid Check. Mini Tune-up. Mixture set to 14.1/14.0. Oil Change & Emission Testing		Emission Test Pass
Nov 9, 2016		Oil Change & Fluid Check. Mini Tune-up. Mixture set to 14.1/14.0. Oil Change & Emission Testing		Emission Test Pass
Dec 15, 2017		Oil Change & Fluid Check. Mini Tune-up. Mixture set to 14.1/14.0. Oil Change & Emission Testing		Emission Test Pass

Engine: AMC 304 CID V8. 150 HP @ 4200 rpm (Torque 245 @ 2500 rpm)

The AMC 304 uses a cast iron block and heads with over head valves and hydraulic lifters. The AMC 304 was introduced in Jeep vehicles in 1971 in J-series pickups and Wagoneers and in 1972 in the CJ vehicles. Early 304s performed well, so well that frame changes were made to the CJs in '73 to prevent cracks.

Meeting legal requirements for smog controls on the 304 severely hurt performance of the engine. In 1971, the engine put out 210 HP @ 4400 rpm (Torque 300 @ 2600 rpm). By 1980-81, this had been reduced to 125 HP @ 3200 rpm (Torque 220 @ 2400 rpm).

Normal Oil Pressure; 50 psi. Absolute minimums: 13 psi @ 600 rpm & 37 psi @ 1600 rpm and higher.

Fuel Consumption: 9.526 usgal over 78.4 indicated miles = 8.23 mpg indicated = 6.9 mpg actual.

Transmission: Borg-Warner T-15 - 3 speed
(http://www.novak-adapt.com/knowledge/t15.htm)

The Borg-Warner T-15 is a 3 speed transmission with a cast iron case with a casting number of T15 or 1307. The casting numbers on the T-15 are on the passenger side near the top back. It has a 1 1/8" 10 spline input shaft. The T-15 has a 1 3/8" 6 spline output shaft. It has a reputation as the strongest of the 3 speeds.

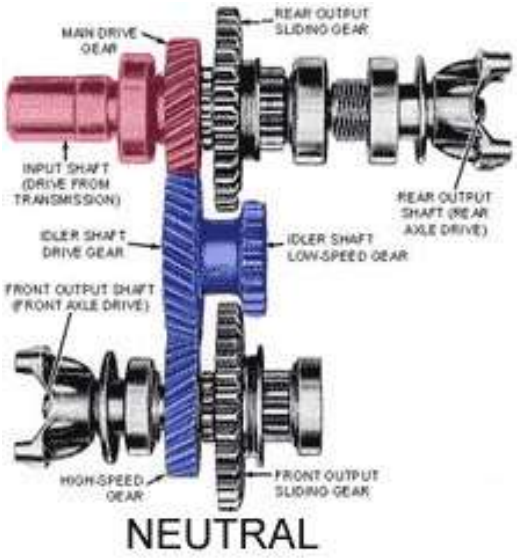
Gear	Ratio
1st:	3.00
2nd:	1.83
3rd:	1.0
Reverse:	3.00

- ❑ Transmission rebuilt – Jan 2014 by "Herm the Overdrive Guy", Installed by Knucklebusters.
  - Transmission failed immediately. Jumped out of first gear when throttle let off.
  - Drained fluids and replaced. Original fluid was very cloudy and had fine particles. Evidence of water as oil was emulsified.
  - There were also other problems found with other work done at the same time. Would not recommend Knucklebusters!
- ❑ New Transmission received from "Herm the Overdrive Guy" – Jan 17, 2015. Previous one removed and replacement installed by Desert Fab Motorsports.
  - Failed transmission returned to "Herm the Overdrive Guy" for warranty and analysis of failure. Report back that no problems were found and that they installed new bearings *(if no damage, why install new bearings??)* and then resold unit to another person. Not clear if cause of failure was rebuilder or installer, but suspect that fluid added by Knucklebusters was contaminated resulting in bearing damage.

Transfer Case: Dana 20

The Dana 20 is a heavy duty gear driven transfer case that takes a 26 tooth input gear. The case and tail housing are cast iron. The output for the front driveshaft on the Dana 20 is on the passenger side and the rear output is centered. Low range is 2.03 and high is 1.00. The poor low range of this transfer case makes it less desirable.

The Dana 20 can be identified by the center rear output, cast iron tail housing, and deep oil pan. The Dana 18 has an offset rear output, other than that, it looks a lot like a Dana 20. The Dana 300 uses a round bolt pattern with 23 spline input, an aluminum housing (often painted or covered with grime), and a nearly flat oil pan. Both the Dana 18 and Dana 20 the "Texas" bolt pattern with 5 bolts holding on the transfer case.



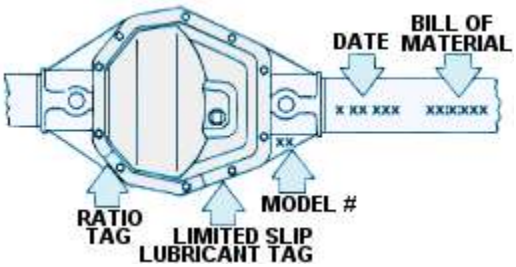
Usage: The Dana 20 was used in CJs from 1972 until 1979. It was introduced in larger Jeep trucks in the 1963, but it wasn't used in any Jeep trucks after 1979.

Can be flat towed with transfer case in neutral and transmission in gear (1st).

- ❑ Twin stick conversion on Dana 20 Transfer Case.
- ❑ Rebuilt with Tera-Low (3.15 to 1) Gear Set – Jan 2014 by “Herm the Overdrive Guy”
- ❑ Heavier detents and spacers installed as required for twin stick conversion.

Front Axle: Dana 30 – 5350863 41 11 - Ratio 3.73 (3.1 with 33” tires)

Rear Axle: Dana 44 – Ratio 3.73 (3.1 with 33” tires)



Propeller Shafts: Precision - Universal Joint, Part Number: 380, UPC: 746079016442

Detailed Description

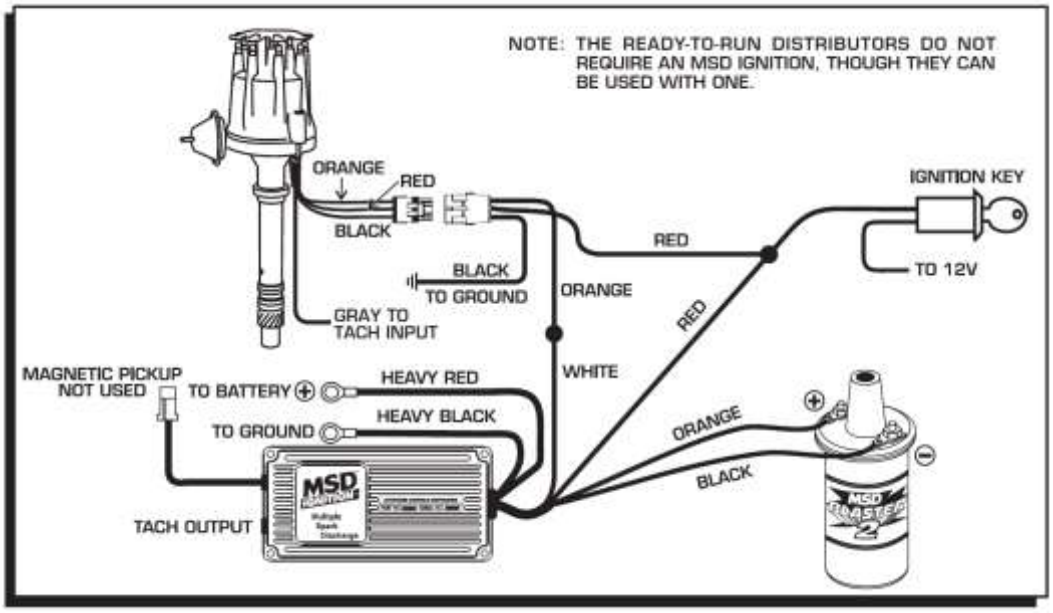
Can be lubricated: Yes
Lube Fitting Location: Flush-Type Lube Fitting In Bearing
Bearing Type: Round Plain
Bearing Diameter: 1.063" (27.0mm)
Width (to caps): 3.220" (81.7mm)
OE Series: Spicer 1310

Fluids

	Spec	CJ5 Capacities							
		US				Litre	Imperial		
		Pints	oz.	Quarts	Gallon		Pints	Quarts	Gallon
Engine - 304 V8	SAE-30	10	160	5	1.25	4.73	8.3	4.2	1.04
Cooling System - 304 V8		26	416	13	3.25	12.3	21.6	10.8	2.71
Transfer Case - Dana 20	SAE 80 Gear Lube (API, GL-4)	3.25	52	1.63	0.41	1.54	2.7	1.4	0.34
Transmission - T15 3 speed	SAE 80 Gear Lube (API, GL-4)	2.75	44	1.38	0.34	1.3	2.3	1.1	0.29
	Total:	*6*	*96*	*3.0*	*0.75*	*2.84*	*5.0*	*2.5*	*0.62*
Differential - Front - Dana 30	SAE-80 (Mil-L-2105B)	2.5	40	1.25	0.31	1.18	2.1	1.0	0.26
Differential - Rear - Dana 44	SAE-80 (Mil-L-2105B)	3.0	48	1.50	0.38	1.42	2.5	1.2	0.31
	Total:	*5.5*	*88*	*2.75*	*0.69*	*2.6*	*4.6*	*2.3*	*0.57*

Installed Upgrades:

- ❑ 4 point seat belts.
- ❑ Custom off road seats (Front)
- ❑ Custom Duster – Sunbrella Black Cherry c/w Black 2” Webbing Back Panel.
- ❑ Stainless Steel Fasteners.
- ❑ “Painless” Brand wiring
- ❑ MDS Ignition (MSD 6A – Part #:6200 Serial #:595799)
- ❑ MDS Pro-Billet Distributor Model #: 8523



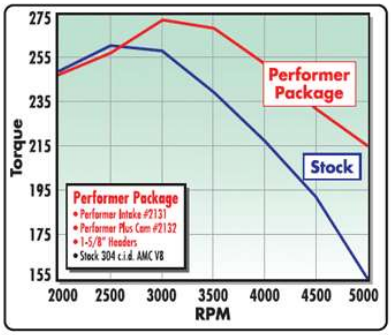
- ❑ MDS High Energy “Blaster” Coil
- ❑ MDS Super Conductor Spark Plug Wires

- ❑ Edelbrock Carburetor – Model 1406 (7241) 600 CFM, Electric Choke, Calibrated for Fuel Economy.

  Designed for small-block and small displacement big-block engines, these carbs are recommended only for stock to Performer level applications. They are not recommended for use on RPM or Torker II intake manifolds. Match with an Edelbrock Performer or Performer EPS manifold and other brands of similar design. Calibrated 2% leaner than #1405. Includes both timed and full vacuum ports for ignition advance. Comes with: Metering Jets - Primary .098, Secondary .095; Metering Rods - .075 x .047; Step-Up Spring - yellow (4" Hg). Use our Carb Stud Kits #8008 or #8024 if needed, see Installation Items. For auto trans throttle lever adapters and more, see Tuning Accessories.

#1406

- ❑ Edelbrock Performer Intake Manifold – Part #: 2131 (Non-EGR, 0 – 5500 RPM)



AMC 290-401 V8

PERFORMER AMC (idle-5500 rpm)

Designed for 1970-91 street 290-304-343-360-390-401 c.i.d. V8 engines. #2131 is a stock replacement/street legal part on 360-401 V8s with OEM carb; 1970-72; except stock equipped EGR.

- ❑ Custom Chrome Open Air Cleaner
  - O/D 13 5/8" – 13 ¾"
  - Thickness: 1"
  - Fram CA136
  - AC Delco: AC212CW, AC212CWR, A279C, A690C
  - WIX: 42095
  - Motorcraft: FA75R
- ❑ Warn Winch – MX6085 (M= MRV-8-7 N= 17103)

- ❑ Full Roll Cage
- ❑ Custom Light Bar (Knuklebusters)
- ❑ Eclipse 40" Off Road LED Light Bar - 120W
- ❑ Tow Bar
- ❑ Headers and Dual Exhaust
- ❑ Custom Gauges – 2 5/8" Phantom by Auto Meter - http://www.autometer.com/cat_gaugelist.aspx?sid=7&opid=2&szid=3

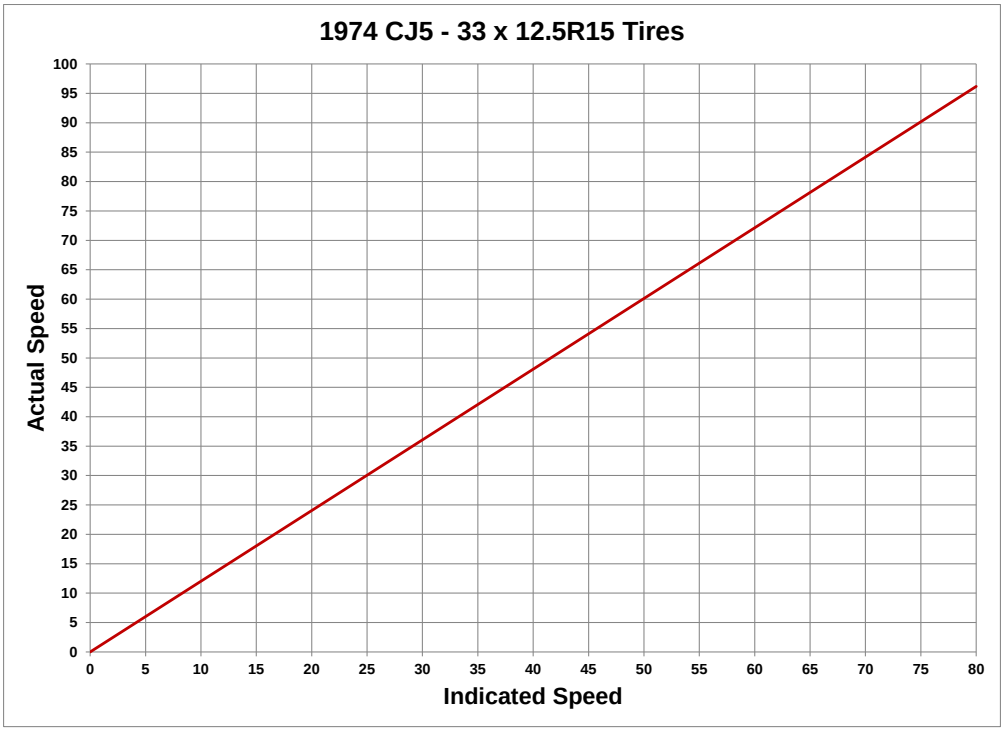
  Note: Fuel Gauge Calibration – 73 Ohms (Empty) / 23 Ohms (1/2 Full) / 10 Ohms (Full)

- ❑ Power Steering – Not stock. Probably a 1975 – 1979 Jeep system added later.
  - Pump is www.cardone.com Part #: 20-7879 (Rebuilt unit installed Mar 5, 2012) *Note: has press on pulley, NOT keyed shaft and nut like stock 1974 would have (i.e. NOT a 20-6179).*
  - Steering Box is www.cardone.com Part #: 27-7521 (Not Confirmed)

- ❑ Borgeson Steering Shaft. Model - BOR000903

- ❑ Gel Battery

- ❑ B.F. Goodrich All-Terrain T/A 33x12.50R15LT 108R M+S Load Range G tires.



Gear Ratio & Tire Size Chart from http://www.jeep4x4center.com/jeep-tires/tire-gear-ratio-chart.htm

Considering making modifications to your Jeep? Whether it is changing an axle or going with different tires this chart is helpful in finding the right Tire Size to Gear Ratio that you need to achieve the optimal performance for your particular application.

Also, when making altering your factory gear ratio or wheel size your speedometer and odometer may read incorrect. Make the necessary changes to your speedo by replacing your Jeep Speedometer Gear .

A basic method to calculate is to mutiply .12 by your tire diameter. (.12 X 38" = 4.56)

The below table can be used to get a rough idea on gear ratios. The colors represent ideal RPM's at highway speeds (65). These calculations are assuming a manual transmission with a 1:1 ratio. If you drive an automatic your RPMs will be slightly higher, and the opposite is true if you have overdrive (your RPMs will be slightly lower).

Standard Tire Size for reference:

Standard tire size: F78 – 15 or (P205/75R15 or optionally P215/70R15)
Tire width (mm): 198 mm
Tire sidewall factor: 78
Rim size (in): 15
Total wheel diameter (mm / in):690 / 27.2

Mileage & Speedometer adjustment:

With 33” tires, the speedometer offset is 1.202.

Highway cruising and best fuel economy stay towards the yellow (2600 rpm)
Around town daily driving is color coded green (2800 rpm)
Better towing power or just more 4-low power use the ratios near the red (3100 rpm).

		Find your Gear Ratio														
		3.31	*3.42*	*3.55*	***3.73***	*3.91*	*4.11*	*4.27*	*4.56*	*4.88*	*5.13*	*5.29*	*5.38*	*5.71*	*6.17*	*7.17*
Tire Size	*27"*	2677	2766	2872	3017	3163	3325	3454	3689	3947	4150	4279	4352	4619	4991	5800
	28"	2582	2668	2769	2909	3050	3206	3331	3557	3806	4001	4126	4196	4454	4813	5593
	29"	2493	2576	2674	2809	2945	3095	3216	3434	3675	3863	3984	4052	4300	4647	5400
	30"	2410	2490	2584	2715	2846	2992	3109	3320	3553	3735	3851	3917	4157	4492	5220
	31"	2332	2409	2501	2628	2755	2896	3008	3213	3838	3614	3727	3790	4023	4347	5051
	32"	2259	2334	2423	2546	2696	2805	2914	3112	3331	3501	3610	3672	3897	4211	4894
	33"	2191	2263	2349	**2469**	2588	2720	2826	3018	3230	3395	3501	3561	3779	4093	4745
	34"	2126	2197	2280	2396	2512	2640	2743	2929	3135	3295	3398	3456	3668	3963	4606
	35"	2065	2134	2215	2328	2440	2565	2664	2845	3045	3201	3301	3357	3563	3850	4474
	36"	2008	2075	2154	2263	2372	2493	2590	2766	2961	3112	3209	3264	3464	3743	4350
	37"	1954	2019	2095	2203	2308	2426	2520	2692	2881	3028	3123	3176	3370	3642	4243
	38"	1902	1966	2040	2144	2247	2362	2454	2621	2805	2948	3040	3092	3282	3546	4121
	39"	1854	1915	1988	2089	2190	2302	2391	2554	2733	2873	2962	3013	3198	3455	4015
	40"	1807	1867	1938	2037	2135	2244	2331	2490	2664	2801	2888	2937	3118	3369	3915
	41"	1763	1822	1891	1987	2083	2189	2275	2429	2599	2733	2818	2866	3042	3287	3819
	42"	1721	1778	1846	1940	2033	2137	2220	2371	2538	2668	2751	2798	2969	3208	3728
	43"	1681	1737	1803	1894	1986	2087	2169	2316	2479	2606	2687	2733	2900	3134	3642
	44"	1643	1698	1762	1851	1941	2040	2119	2263	2422	2546	2626	2670	2834	3063	3559

- ❑ Superlift 4” Suspension Lift (http://www.superlift.com/lift-kits/4-inch-1995-1975-jeep-suspension-lift-kit.asp). Note: Originally installed springs upgraded to latest version Jan 17, 2016.
- ❑ Reverse Shackles
- ❑ Body Lift (1 inch). Polyurethane bushing kit for body and suspension
- ❑ Viair Heavy Duty Onboard Air system (part # 10005).

Vin Numbers for 1971 to 1974		
Character		
1st	**J = Jeep American Motors**	Make
2nd	1 = 1971 2 = 1972 3 = 1973 **4 = 1974**	Year
3rd	A = Toledo - Auto - LHD B = CKD - Auto - LHD **F = Toledo - 3 Speed - LHD** G = Toledo - 3 Speed RHD J = CKD - 3 Speed - LHD K = CKD - 3 Speed RHD M = Toledo - 4 Speed - LHD N = Toledo - 4 Speed - RHD O = CKD - 4 Speed - LHD P = CKD - 4 speed RHD	Plant - Transmission - Drive
4th & 5th	63 = CJ5 81" Wheelbase CKD 64 = CJ6 101" Wheelbase CKD **83 = Universal, CJ-5, 84" Wheelbase, 4 Wheel Drive** 84 = CJ6 104" Wheelbase 4 x 2	Series
6th	**5 = Open Body**	Body Style
7th	A = CJ5 - 3750 lbs E = CJ5 - 4150 lbs H.D. R = CJ6 - 4750 lbs (max) S = CJ5 - 4500 lbs (max) **T = 3750# GVW, model 83**	Body Type - GVW
8th	A = 258 Six Regular B = 258 Six L/C E = 232 Six Regular F = 232 Six L/C **H = 304 V8 Regular** R = 134 four Regular T = 134 Four L/C	Engine
9th - 13th	###### **(37056)**	SSN (Sequential Serial Number)

Manufacturers Stock Data

Make:	**Jeep**
Model:	**CJ-5**
Type:	**CJ-5 AMC**
EEC segmentation:	**J (sport utility cars and off-road vehicles)**
Class:	**compact off-road / SUV (sport utility vehicle)**
Body style:	**open off-road, opt. soft-top**
Doors:	**2**
Traction:	**4x4 part-time (rear permanent, front engaged manually in off-road conditions)**

Identification Data

JEEP CJ-5 304 V-8	as offered for 1974 in North America U.S.
Production/Sales Period:	1972 - 1975
Modelyears:	1973 - 1975
Country of origin:	USA

Dimensions and Capacities

Length:	138.2 in (3,510 mm)
Width:	68.5 in (1,740 mm)
Height:	67.7 in (1,720 mm)
Wheelbase:	83.5 in (2,121 mm)[13] (1972-1983)
Front track:	**1308 mm / 51.5 in**
Rear track:	**1270 mm / 50 in**
Ground clearance:	**203 mm / 8 in**
Fuel capacity:	**57 litre / 15.1 U.S. gal / 12.5 imp. gal**
Turning circle btw. curbs:	**10.03 m / 32.9 ft**
Drag coefficient estimated by a-c:	**0.8**
Interior length:	
Interior width:	
Boot length max.:	**914 mm / 36 in**
Boot width:	**1010 mm / 39.8 in**

Weights

Curb weight (without a driver):	**2,665 lb (1,209 kg)**
GVWR:	**3650 lb (1655.6 kg)**
GAWR (Front):	**2200 lb (997.9 kg)**
GAWR (Rear):	**2700 lb (1224.7 kg)**

Payload:	**985 lb (446.8 kg)**

Power Train

Engine manufacturer:	**AMC 304 V8**
Engine type:	spark-ignition 4-stroke
Fuel type:	petrol (gasoline)
Fuel system:	carburetor
Charge system:	naturally aspirated
Valves per cylinder:	2
Valves timing:	
Additional features:	Motorcraft 2-barrel, OHV
Cylinders alignment:	V 8
Displacement:	4981 cm3 / 303.9 cui
Bore:	95.25 mm / 3.75 in
Stroke:	87.38 mm / 3.44 in
Compression ratio:	8.4 : 1
Power net:	112 kW / 152 PS / 150 hp (SAE net) / 4200
Torque:	332 Nm / 245 ft-lb/ 2500
Redline rpm:	

Performance

Theoretical Top speed:	145 km/h / 90 mph (w/o speed governor)
Top speed:	135 km/h / 84 mph

Acceleration:

0-30 km/h (s):	**1.7**
0-40 km/h (s):	**2.1**
0-50 km/h (s):	**2.7**
0-60 km/h (s):	**3.7**
0-70 km/h (s):	**4.6**
0-80 km/h (s):	**5.6**
0-90 km/h (s):	**7.5**
0-100 km/h (s):	**9.6**
0-110 km/h (s)	**12**
0-120 km/h (s):	**15.1**
0-130 km/h (s):	**19.6**
0-140 km/h (s):	**30**
0-20 mph (s):	**1.8**
0-30 mph (s):	**2.6**
0-40 mph (s):	**4.1**
0-50 mph (s):	**5.7**
0-60 mph (s):	**8.9**
0-70 mph (s):	**12.8**
0-80 mph (s):	**18.9**
0-90 mph (s):	**120.9**
0- 1/4mile (s):	**16.8**
speed at 1/4mile:	**124 km/h / 77 mph**
0- 1km (s):	**32.5**

Acceleration in gears:

60-100 km/h 3rd gear:	**7.5 seconds**
80-120 km/h 3rd gear:	**9.4 seconds**
40-60 mph 3rd gear:	**6.0 seconds**
50-70 mph 3rd gear:	**7.0 seconds**

Overtaking factors:

60-100 km/h:	**5.9 seconds**
80-120 km/h:	**9.4 seconds**
40-70 mph:	**8.7 seconds**
50-90 mph:	**115.2 seconds**

Fuel consumption	**extra-urban**	**city**	**highway**	**average combined**
l/100km:	**18 - 23**	**29 - 37**	**22 - 28**	**25.1**
mpg (imp.):	**12 - 16**	**8 - 10**	**10 - 13**	**11.3**
mpg (U.S.):	**10 - 13**	**6 - 8**	**8 - 11**	**9.4**
km/l:	**4.0 – 6.0**	**2.7-3.4**	**4.0 - 5.0**	**4.0**

Spark Plugs

Brand	Type	Stock #	Part #
Autolite	Platinum		AP65
Champion	Platinum	3405	3405
Champion	Traditional	405	RN14YC
Bosch	Platinum Plus	4037	WR9LP+
Bosch	Super Plus	7922	WR10LC
NGK	V-Power	2635	GR4
NGK	G-Power	2763	GR4GP
NGK	Iridium IX	7149	GR4IX

Ignition Timing – MSD Ignition and Distributor

Circumference of dampener = 546 mm. 10^{o} = 15.17 mm, 20^{o} = 30.33 mm, 30^{o} = 45.5 mm, 40^{o} = 60.67 mm

Setting idle Mixture – Edelbrock 1406 Carb *(Note: Mar 12/2012 Emission test passed with each screw set at 12/8 open)*

Note: Idle mixture screws are very sensitive. 1/8 turn is enough to change air/fuel mixture > 1%. It is strongly recommended to use air/fuel ratio meter to set accurately for emission testing
Innovate LM-2 Air Fuel Meter

1. Prior to beginning any tuning we made sure the choke was set properly. It should be connected to a 12V key-on source. With a cold motor and the choke flap closed there should be no less than .100" clearance as shown. Other things to check are fuel pressure of no more than 6psi and proper float adjustment.

2. For the purposes of setting idle mixture we used a tach/dwell meter, spare Autometer vacuum gauge, and standard screwdriver. The Edelbrock EPS manual is a great reference and the rod and jet kit will be used for the primary and secondary tuning later in this article.

3. Setting idle mixture should be done with the engine at full operating temperature (choke fully open) and the car in Park, or neutral for manuals. Prior to starting up the car we gently seated the idle mixture screws and then backed them out 2 full turns. We were confident this would make our idle mixture slighty rich to start.

4. At this point, we fired up the engine and let it get up to operating temperature (thermostat open). Once the car reached operating temperature, we shut it down.

5. Next, we connected our tach/dwell meter. Typically, one lead connects to the negative side of the coil while the other attaches to a good ground. Alternatively you can have a helper read off the rpms from a dash mount tach.

6. We hooked up our vacuum gauge to manifold vacuum and set the gauge in a safe spot where it couldn't roll into the fan or on to a hot exhaust header.

7. We fired the car back up and with the car in Park, we read an idle speed of around 730 RPM.

8. We gave the idle speed screw a slight turn clockwise to bump the idle speed to exactly 750 RPM. A good starting point.

9. Next, we took note of our vacuum reading before we began adjusting the idle mixture screws. At 2 turns out we had just under 15" Hg.

10. After adjusting both idle mixture screws our idle speed increased from 750 RPM up to 800 RPM.

11. We adjusted the idle speed back down to 750 RPM.

12. Finally, we noted the effect the corrected idle speed had on our vacuum reading. Looked good. Remember, **the goal of adjusting idle speed is to achieve the highest idle vacuum you can at a set idle speed.**