

429 CJ .vs. SCJ

What's the difference?

The 429 CJ and SCJ engines have always been an area of confusion for most people; however, this page will give you all the details and hidden secrets of determining a 429 CJ from a SCJ.

429's are part of the 385 series family. No parts interchange with the 428's.

Some basic rules:

- The engine V.I.N. number (5th character from left) does not indicate if a certain car came with a CJ or SCJ engine. The only data this decodes is whether a car came with or without ram air.
- The SCJ was automatically installed if a 3.91 traction lock or 4.11 detroit locker rear axle was ordered. You can look at the door tag for axle codes V or Y - however be careful, axle tags are being reproduced.

Component	CJ	SCJ	Comment
Engine oil cooler	No	Yes	Factory with SCJ. Not available with CJ
Ram air	Optional	Optional	Optional on CJ and SCJ
Air conditioning	Optional	Not available	Oil cooler takes place of condensor on SCJ
Auto transmission	Optional	Optional	Same transmission used in CJ and SCJ
Manual transmission	Optional	Optional	Same transmission used in CJ and SCJ
Staggered rear shocks	Yes	Yes	With automatic transmission only
Detroit Locker with 4.11 gear	No	Yes	Part of 429 SCJ Drag Pack option
Traction locker with 3.91 gear	No	Yes	part of 429 SCJ Drag Pack option

Component	CJ	SCJ	Comment
Cast iron tailshaft with C6 trans.	Same	Same	
Big input close ratio 4-speed trans,	Same	Same	
Camshaft	Hydraulic	Mechanical	See page 14.
Oil pan	Same	Same	Same baffled oil pan.
Intake manifold	Spread bore	Holley flange	Both were cast iron. See page 28-29.
Carburetor	Rochester	Holley	See pages 32-34
Exhaust manifolds	Same	Same	Cast iron, hedder type. See pages 40-41.
Engine block *	2 bolt main	4 bolt main	See page 11.
Cylinder heads *	Same	Same	See pages 21-23.
Crankshaft	Same	Same	See page 14.
Connecting rods	Same	Same	See page 20.
Pistons	Cast iron	Forged	
Piston rings	Same	Same	
Flywheel / Flexplate	Same	Same	See page 60-61.
Crankshaft balancer dampner	Same	Same	See page 12-13.

* 1970 CJ blocks used 2 bolt main bearing caps while SCJs used four bolt mains at positions 2, 3 and 4. 1971 engines were all scheduled to use four bolt main blocks. The heads used the same casting numbers along with double springs, guideplates and spring cups - but they used different screw in studs. The CJs were not adjustable while SCJs were.