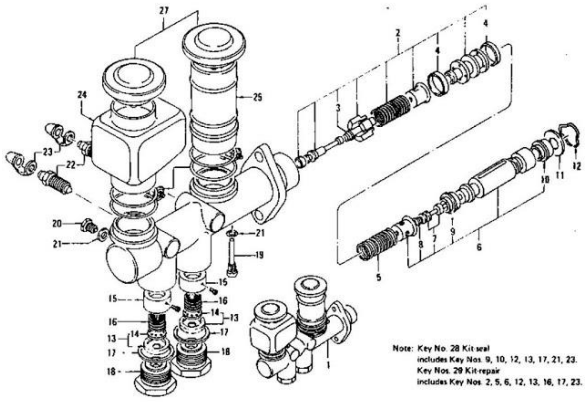
Z-Car Master Cylinder & Brake Booster (MasterVac)

Master Cylinder and MasterVac (Booster) Types – Pt. 1 - Specs

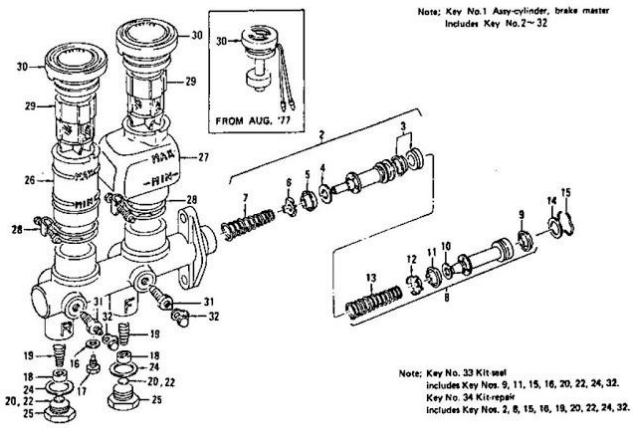
- Master Cylinder:
  - V1 — 7/8" — to Aug-71 — 240Z Series 1 & 2
  - V2 — 7/8" — from Sep-71 — 240Z Series 3, 260Z, 280Z, 2+2
- Master Vac:
  - V1 — 6" — to Jun-72 — 240Z Series 1, 2 and 3.1
  - V2 — 7" — from Jul-72 — 240Z Series 3.2, 260Z, 280Z
  - V3 — 8.5" — from Nov-73 — 2+2 260Z and 280Z

Master Cylinder and MasterVac (Booster) Types – Pt. 2 - Photos and Diagrams

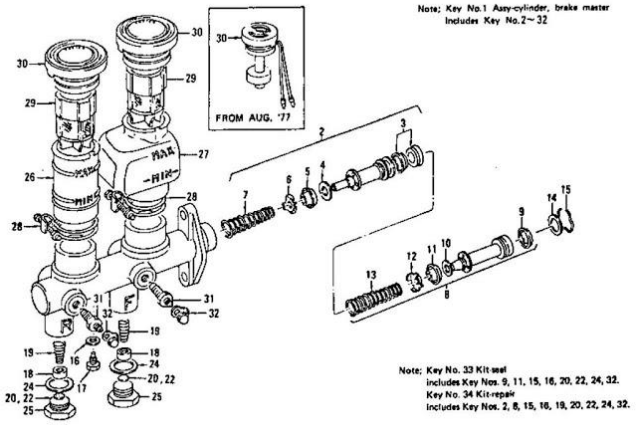
- 1970-71 – Master Cyl = 7/8" NLA / Master Vac = 6" A1 Cardone PN 535245



- Most 1972 – Master Cyl = 7/8" Dorman PN M96583 / Master Vac = 6" A1 Cardone PN 535245

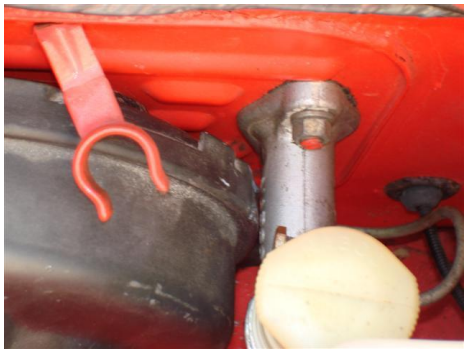


- Very late 1972 to 1978 – Master Cyl = 7/8” Dorman PN M96583 / Master Vac = 7” A1 Cardone PN 535246



Mastervac & Master Cylinder – Swap Guide

- The stock brakes aren't the greatest compared to modern systems that you might be used to. The master vac has a small diameter so it doesn't help as much with braking. This results in more pressure needed at the pedal.
- There are two types: early years, and later years. There are also even larger units for the Z 2+2's and the 280ZX.
    - If your Z was made before 8/71 the master cylinder and brake booster are different.
    - The later Master Cylinder has the front and rear lines and reservoirs flipped, front to rear
    - You can use a '72 master cylinder on an early 240 but need to switch the lines as front and rear circuits are reversed on the 72's. It is still possible to buy the early MC new but it's not cheap.
    - You can get the '72 booster from AutoZone etc.
    - The 72 booster CAN indeed work with an early 71 MC…
        - I used a '72 booster to replace my pre-8/71 unit, but I had to exchange the adjustment screw-tipped MC rod between the booster and the MC (the pre- 8/71 was about 1/4", while the '72 was about 1"). I retained the original MC and reservoirs.
        - I also had to use the brake pedal clevis pin from the '72, because while the '72's inboard rod is a larger diameter, it has a SMALLER diameter clevis pin, the holes on the adjusting "U" shaped bolt just weren't large enough to fit the original clevis pin. This gives a bit of "slack" because the brake pedal's clevis hole is larger than the new clevis.
        - Also, instead of a round snap-ring (on the original clevis), the smaller '72's clevis drilled for a hairpin-type retainer.
- Early units (70-71 and early 72, pre-72-06 build) are smaller (6.0" body),
- Later Z units are bigger (7" body). They can be adapted to early cars, but have a different hole spacing for the mount studs. The horizontal stud centreline separation is 10mm increased from 70mm to 80mm. The vertical spacing is the same. However (per Blue), on an Series 1 (1970-71), you must also drill all holes ~ 5mm - 10mm lower to clear the bell arm bracket and the clutch slave
    - There may be 2 variations here. Cardone rebuilt units specify '72-73' and '73' as separate stock items.
    - Differences show up in vac line attachment location, spacing of the 4 mounting studs, and the push rod length.
- The 280ZX booster is bigger @ 8.5". It fits too… just
- There is also a difference between the Coupe vs. 2+2 (2+2 unit is bigger @ 9")
- Next picture shows a stock 1976 280Z…
- Following pictures [Blue] show the 'big' 280ZX booster installed in a red Series 1 car (before and after)…



- Next picture [Blue] reputedly shows a 280ZX booster installed in a blue 260Z [note the single-reservoir master cylinder]…

- One owner: 'FWIW, mine is a 72 but had a 71 part (6") from day one.'
- Later-year boosters came with a few different sizes of pushrod studs, and there are a few different sizes of end brackets that go on them. When you order one from the parts store, or even Black Dragon, it is the luck of the draw as to what you get. You might have to do a minor mod to the brake pedal retaining pin that secures to the booster unit.
- 8.5" vs 7": It is a very tight fit between the clutch master cylinder on one side and the bracket for the accelerator linkage on the other -- only a couple of mm clearance on each side. You have to be very precise in drilling the holes. Fortunately, they *will* all land within the reinforced pedal box zone of the firewall. On the inside, I just used oversized fender washers to span the old holes. On the outside, the old holes are covered up by the larger booster.

Master Vac Rebuilt Units

- As of Mar-2012, most Nissan dealers no longer stocked the two OE rebuild kits
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