28.5. REFERENCES:

Adams pages 46-7, 122, 189-93, 228-9, 296-301, 330, 389-90

GM Assy Manual	1956-62	Sect	5	Sheet 1.00	thru 6.00
	1956-60	FOA	107	1.00	
	1956-57	RPO	420	1.00	
	1956-59	RPO	677/678/679	1.00	
	1956-60	RPO	684	1.00	thru 5.00
	1960-62	RPO	675	1.00	
		RPO	687	1.00	

NCRS Judging Manual 1953-55, page 43-44
1956-57, page 47
1958-60, page 29
1961-62, page 57

29. TRANSMISSION

All 1953-54 and early 1955 had automatic transmissions. In late 1955, automatics became optional as RPO 313 and the three-speed became standard equipment. In mid-1957, the four-speed was added as an option, RPO 685.

The bellhousing is painted with the engine and may receive total or partial coverage; the transmission is attached later and is painted semi-gloss black.

Bolts connecting the block/bellhouse/transmission are grade 5 and installed without washers. The block/bellhousing uses one long bolt on each side ("M" 3/8-16 x 2.25) and the rest are short ("AP" 3/8-16 x 1.5). The bellhouse/transmission uses "TR" bolts.

Bellhousings are attach to block with black oxide or cadmium plated bolts (dished, hexagon, flared washer head, without lock washers).

Casting Marks: They are not visible with transmission installed.

	1953-55	1956-57	1958-59	1960	1961	1962
Bellhouse	iron	iron (1) iron (2)	iron (2)	alum (3)	alum	alum
Automatic						
Main	iron	iron	iron	iron	iron	alum
Tail	iron	iron	iron	iron	iron	alum
3-Speed						
Main	iron	iron (4)	iron	iron	iron	iron
Tail	iron	iron (5)	iron	iron	iron	iron
4-Speed						
Main	None	iron	iron (6)	iron (6)	iron	alum
Tail	None	alum	alum (7)	alum (7)	alum	alum

(1) 3704922 early to mid 1956; with casting date
(2) 3733365 mid 1956 thru 1959; with casting date
(3) 3764591 without casting date

(4) 3845122 1956 for sure; 1957 maybe
(5) 3722848 1956 for sure; 1957 maybe

(6) with casting month/day on the inneraspect of the main case
(7) with casting month/day/year on tailshaft housing

General Motors Markings:

Beginning 1960, transmissions received a stamping on the flange of the casing during GM assembly. The flange showed portions of the VIN: first digit (year) and last six digits (serial number). Example: 2104277 for VIN 20867S104277.

Manufacturer's Markings: Not visible when transmission installed.

Powerglide transmission ID moved several times:
1953-57 was stamped on the case, rear face, lower passenger corner
1958-61 was stamped on the rear flange of governor cover
1962 before 11 Nov 61 was stamped on the passenger front corner of the case, forward of the oil pan, under the converter underpan
1962 after 11 Nov 61 it moved to the bottom center of the oil pan

Powerglides before 1 July 1953 are marked:
- L for 1953
- V for Cleveland
- serial number beginning 1001
- D or N for work shift (day or night)

Powerglides after 1 July 1953 are marked:
- C for Cleveland
- one or two digit numeric month (1 thru 12)
- two digit numeric day (01 thru 31)
- D or N for work shift (day or night)
- Example: C304N = Cleveland, March 4, night shift

1958-60 Powerglide had a blue nameplate.

Powerglide in 1960-61 are marked same as 1953-59 except:
- month is shown as two digits (Jan = 01, etc)
- W may be added at end to indicate a welded torque converter

Powerglide in 1962 are marked same as earlier except:
- B prefix for aluminum
- month codes may be one or two digits

Three-speed ID was stamped on the case, rear face, upper passenger corner. The markings are the same as Powerglide except first digit may be S for Saginaw or M for Muncie.

Four-speed ID was stamped on the driver side, upper rear corner, behind side cover. The four-speed had a slightly different coding:
- W for Warner plant
- one alpha for month (A for Jan, ect.)
- one or two numerics for the day (1 thru 31)
- one numeric for the calendar year of manufacture
- one numeric for the work shift (1, 2, or 3)
- Example: WB1381 for Warner Gear, Feb 1958, day shift

29.1. AUTOMATIC:	1953	1954	1955	1956
Trans Assy	3706148 3703291	3709676 3713604	3709676 3719244	3737867 3719245
Safety Switch Assy	yes	yes	1988112	1998112

	1957	1958-60	1961	1962
Trans Assy	3738797	3745282	3779889	3795305
Safety Switch Assy	1998112	1998660	1991520	1993566

3706148: ?

3703291: ?

3709676: ?

3713604: ?

3719244: ?

3737867: ?

3719245: ?

3738797: ?

3745282: The Powerglide converter housing cover used 33 bolts (passenger cars used 18). The rear extension housing contains the speedometer fitting and three tapped bosses for mounting the shift control assembly.

3779889: cast iron, two-speed

3795305: cast aluminum, two-speed

1998112: V-8 Powerglide only; prevents starting the car in gear.

1991520: mounted on the driver side of transmission main housing

1993566: mounted on the driver side of upper bell housing

29.1. AUTOMATIC continued

In 1955 the automatic was listed as an option (RPO 313), but in reality it appears on 75 percent of the vehicles because the 3-speed was not available until late in the production year. The production baseline switched from automatic to 3-speed between VIN -1659 and -1679.

Powerglide neutral safety switch, shield, and mounting hardware are unpainted and mount on driver side of case.

No oil cooler or fluid lines are used; Six cylinder vacuum modulator is on passenger side; V-8 has no vacuum modulator.

The dipstick tube and wire rod handle mount on passenger side and are painted semi-gloss black. Six cylinder dipstick measures 18 inches total length; V-8 measures 14-3/16 inches.

Powerglide is cast iron housing; dipstick tube and wire rod handle are painted semi-gloss black. Neutral safety switch, shield, and mounting hardware are unpainted and mount to left side of case.

29.2. THREE SPEED:	1955	1956-57	1958-60	1961-62
Trans Assy	3723174	3737326 3746972	3748560	3748570 3813391

3723174: This assembly includes the housing, extension, gears, and cover with two control arms. It is the same as one used in Chevy passenger cars except the Corvette's tailshaft (left-rear area) is built-up with three drilled and tapped holes for mounting the shift lever.

3737326: From AIM 9-15-55 until AIM 7-22-57
Cast numbers: housing 3845122; tailshaft 3722848; cover 3731911

3746972: After AIM 7-22-57

3748560: Same unit used on 55-62 except changes to lever assy.

3748570: 1961 only

3813391: 1962 only

Exactly when the 3-speed first appeared is not pinponted. Three early and apparently authentic prototypes (VIN -1353, -1442 and -1551) have surfaced without frame-mounted return spring bracket. The first known 1955 3-speed with the early production design is VIN -1578; it has both the frame-mounted return spring bracket and the early-type spring mounted under the dash and brake pedal.

The above four prototype 3-speed VINs share common peculiarities. The fiberglass tunnel was rough and crudely modified around the shifter. Instead of a depressed area for the Powerglide lever, each has a raised plate over the linkage. Two of the four had a cone-shaped boot around the lever, the bottom edge sewn into the carpet (original carpet on the other two was not available).

A design order was initiated 12-29-54 and completed 4-12-55. The production line switched from automatic to 3-speed between VIN -1659 and -1679. Except for the four prototypes mentioned above, earlier installations were probably retrofitted by dealers (indicated by crude workmanship).

Clutch linkage is chassis black; bellhousing fully/partially engine color. The speedometer cable is cadmium plated

Manual bellhousing iron castings are 3704922 (early to mid 1956) or 3722265 (mid 1956 thru 1957). Both with passenger car mounting bosses, casting dates, and painted engine color. Clutch linkage is semi-gloss black; speedometer cable housing is cadmium plated.

29.3 FOUR SPEED:	1957-60	1961	1962
Trans Assy	3743441	3783311	3817367
Rear Mount	3744074	3744074	3813335
Spacer	none	none	3813336

3743441: After AIM 4-9-57; cast iron case
Tail shaft changed to aluminum in mid 1957.
Bell housing changed to aluminum at start of 1960.

3783311: ?

3817367: ?

3744074: ?

3813335: ?

3813336: The new mounting bracket required a spacer between the frame and rear cross member to lower the member so the standard rubber mount (PN 3711049) could be used.

1957 was the first year the four-speed (RPO 685) was available. The T-10 was introduced on AIM 4-9-57 and represented about 10.5 percent of total production, but most all the late 57s. A factory kit was available to convert from 3-speed to 4-speed which makes early 57s appear original if properly installed.

The four-speed is cast iron except for aluminum tailshaft. Clutch linkage is semi-gloss black; speedometer cable housing is cadmium plated.

1958-60 passenger engines mount the four-speed on built-up bosses; Corvette bell housings are plain.

Four-speed units are cast iron main case with an aluminum tailshaft housing. Bellhousings are cast iron (3733365).

29.4. REFERENCES

Adams pages: 56-7, 62, 64-70, 94, 98, 132-4, 198, 237, 335
RPO 313 Automatic: 160-1, 265-7, 361-3
RPO 685 Four-Speed: 191-3, 298-9, 387-88

GM Assy Manuals 1956-62 Sect 7
RPO 313
RPO 685

NCRS Specifications 1953-72, page 48
NCRS Judging Manual 1953-55, page 44
1956-57, page 43 & 47
1958-59, page 23
1961-62, page 18