

# C2 Chassis Judging©

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Jim Rand



# Chassis Judging Objectives

- Compare and contrast 1963-1967
  - Configurations
  - Finishes



# Master Cylinder & Cap



1964



1966



1965

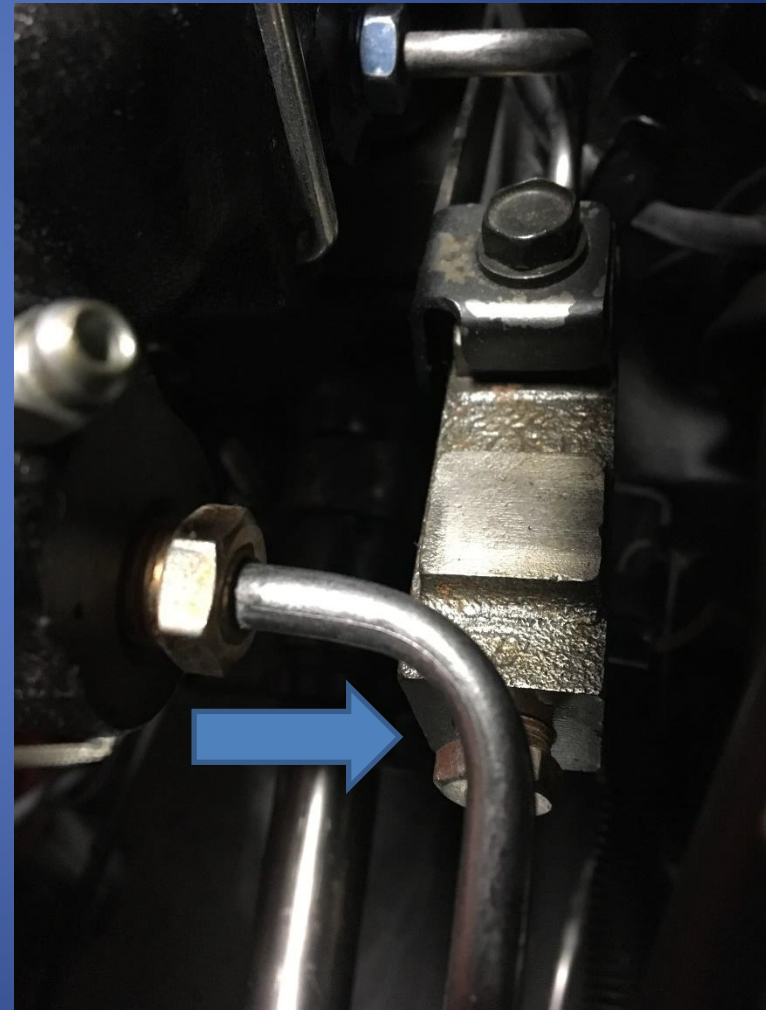


1967

# 1967 Master Cylinder

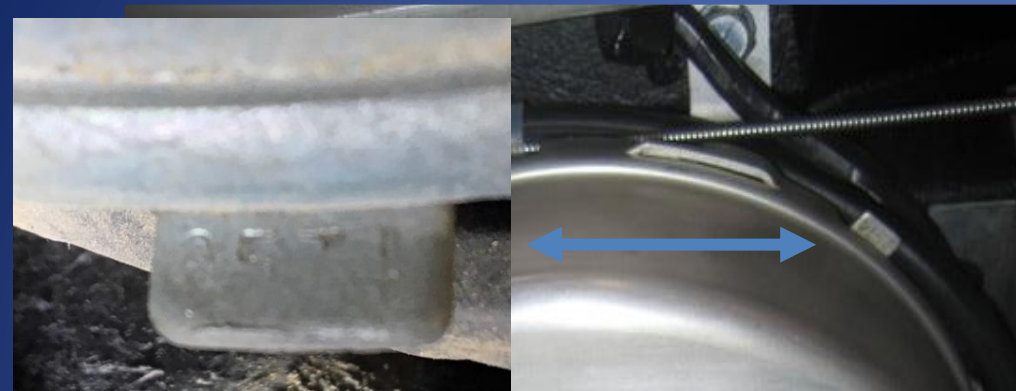


Brake Safety Switch





# 1963 Power Brake Booster

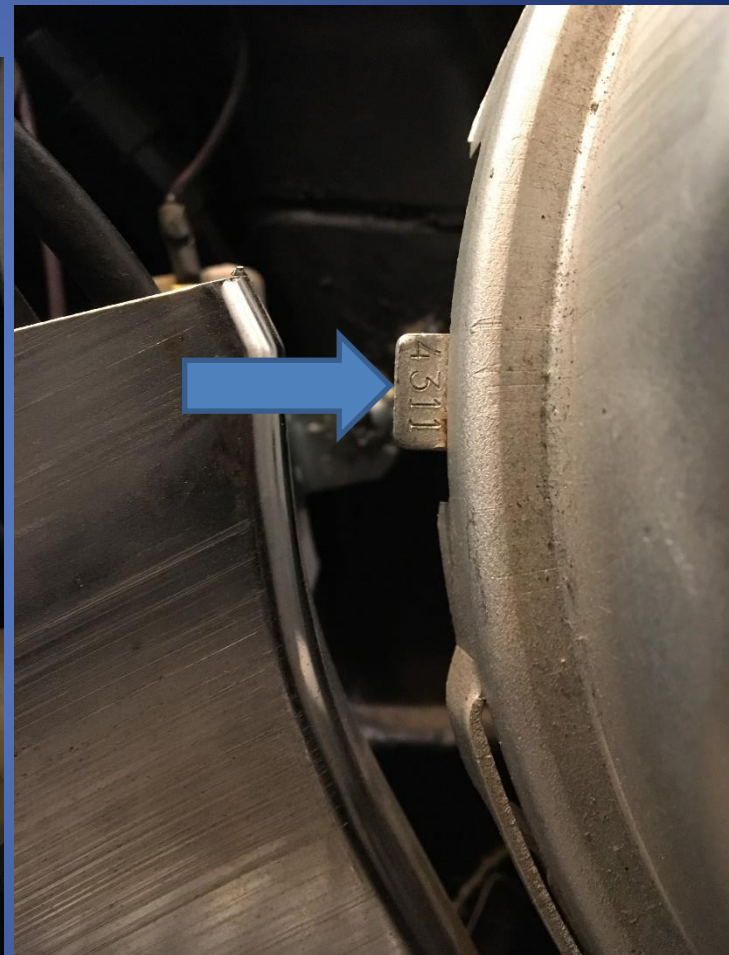


Z06

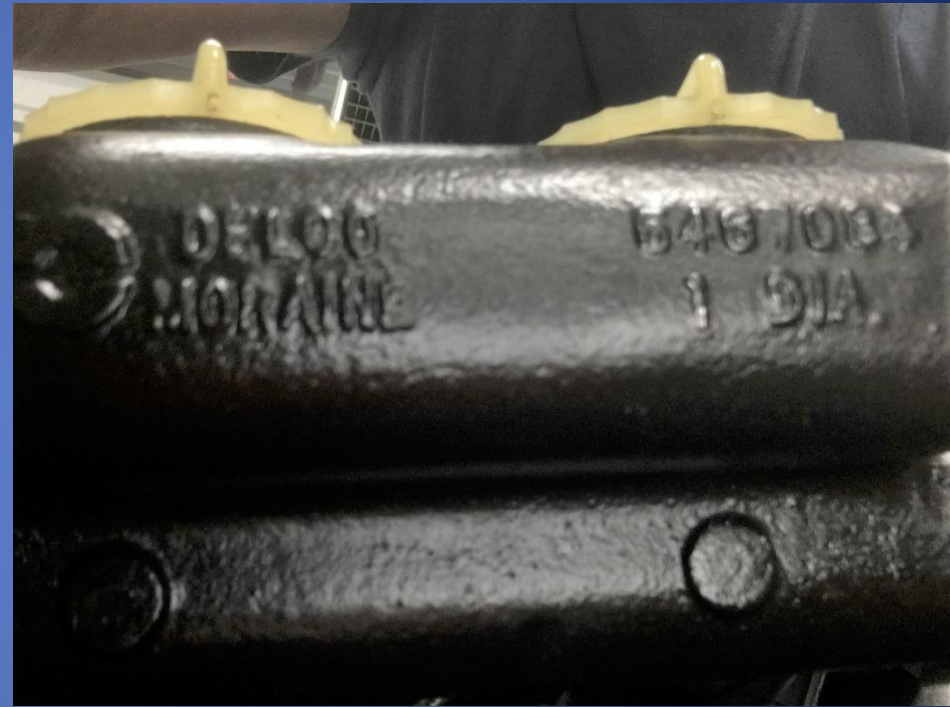
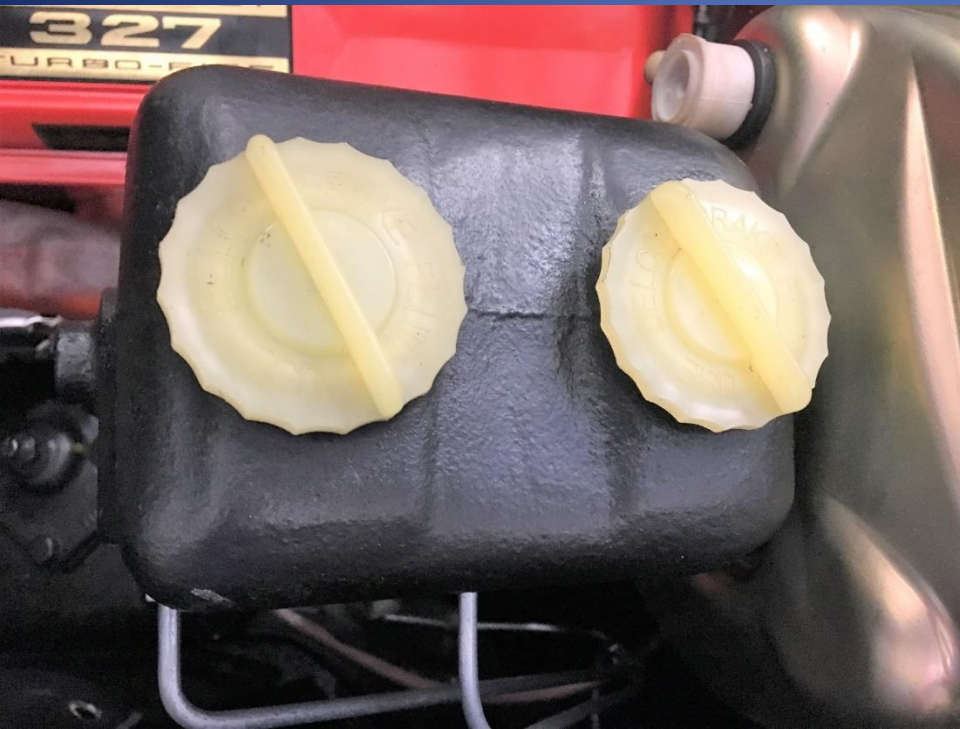
# Power Brake Booster

Year	No.	Check valve
1963	5462574	Outboard
1964	5464311	Inboard
1965	5467011	Inboard
1966	5467011	Inboard
1967	5455867	Inboard

# Power Brake 1964 J56



# Power Brake 1965-1966



# J56 Power Brake

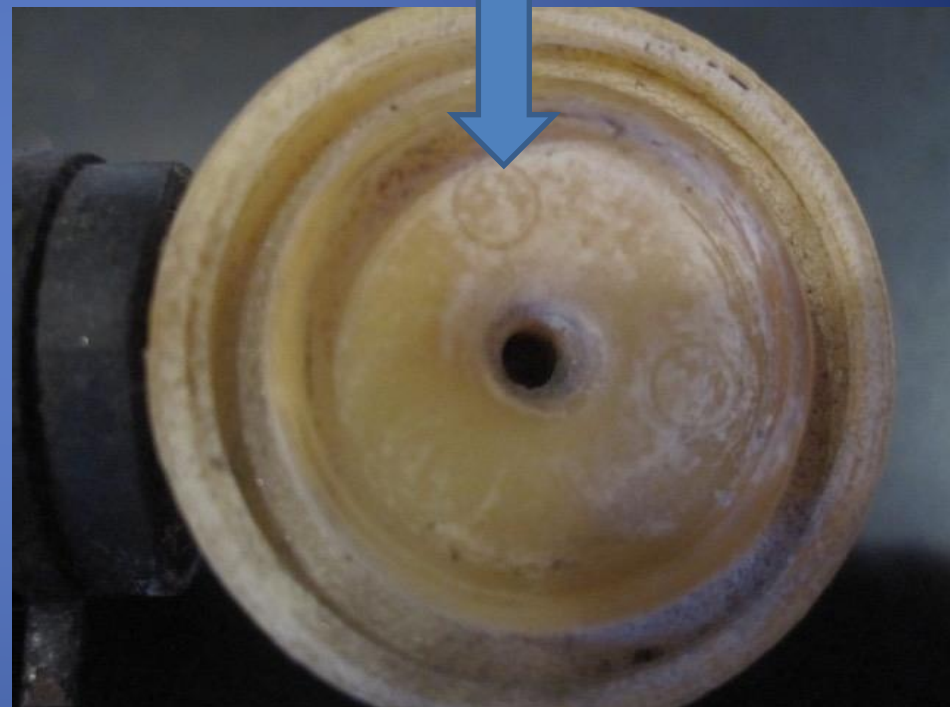


Proportioning Valve



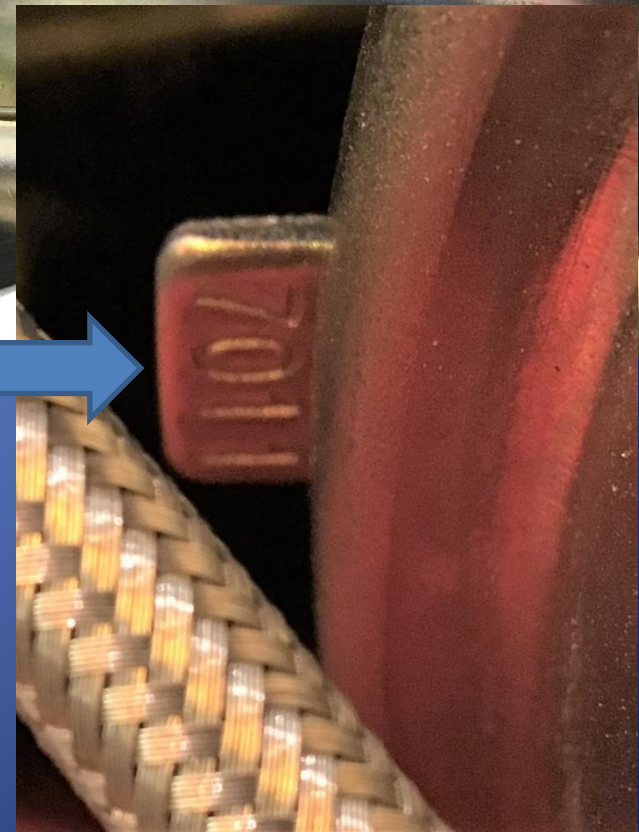
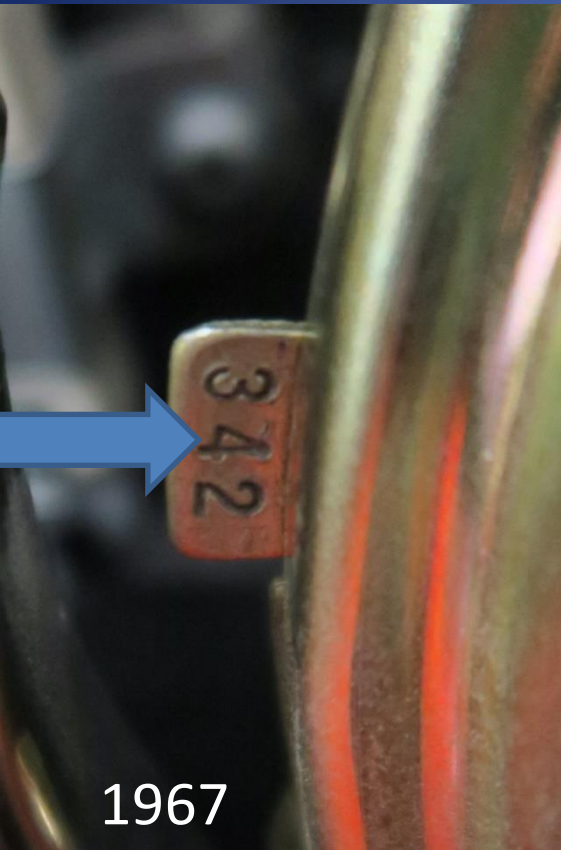
L88 Master Cylinder

# Power Brake Booster Check Valve

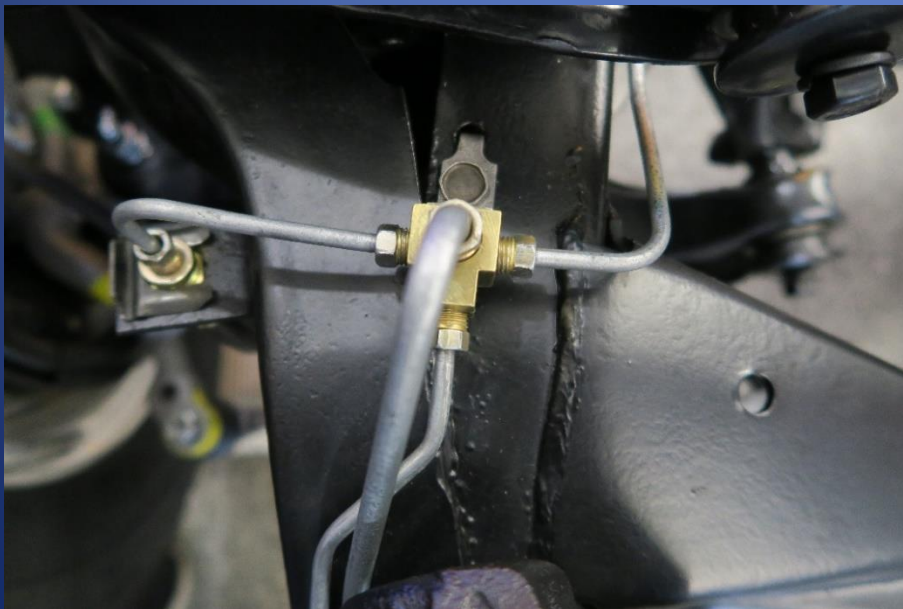


1964-1967

# Power Brake Booster 1964- 1967



# Valves, Lines, Fittings, Clips



# Steering Column



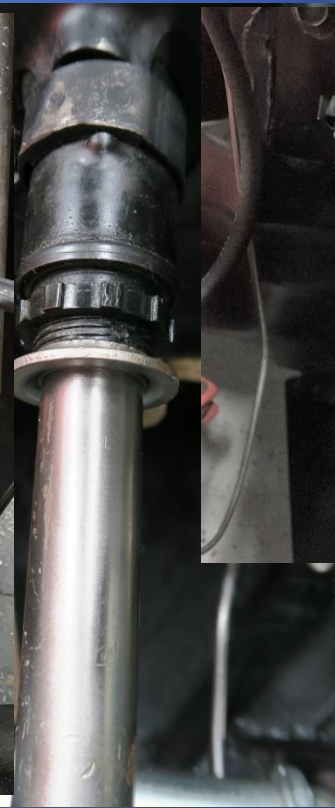
1963



1965



1966



1967

After  
VIN  
9400

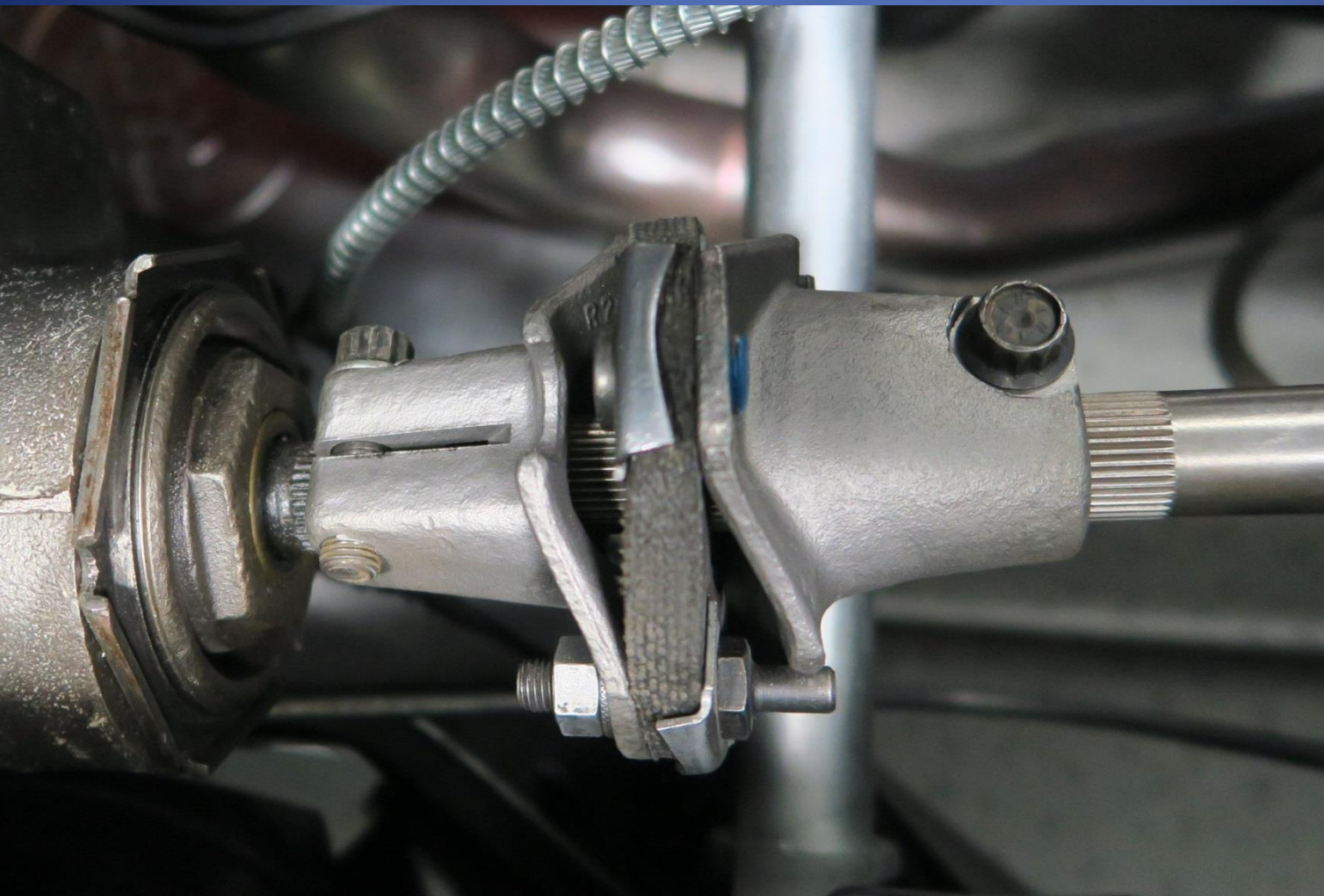
# Rag Joint

Year	Color	Rivet Location
1963	Natural	Upper flange
1964	Natural	Upper flange
1965	Nat. or paint*	Upper flange except tele
1966	Nat. or paint*	Upper flange except tele
1967	Nat or paint*	Upper flange except tele

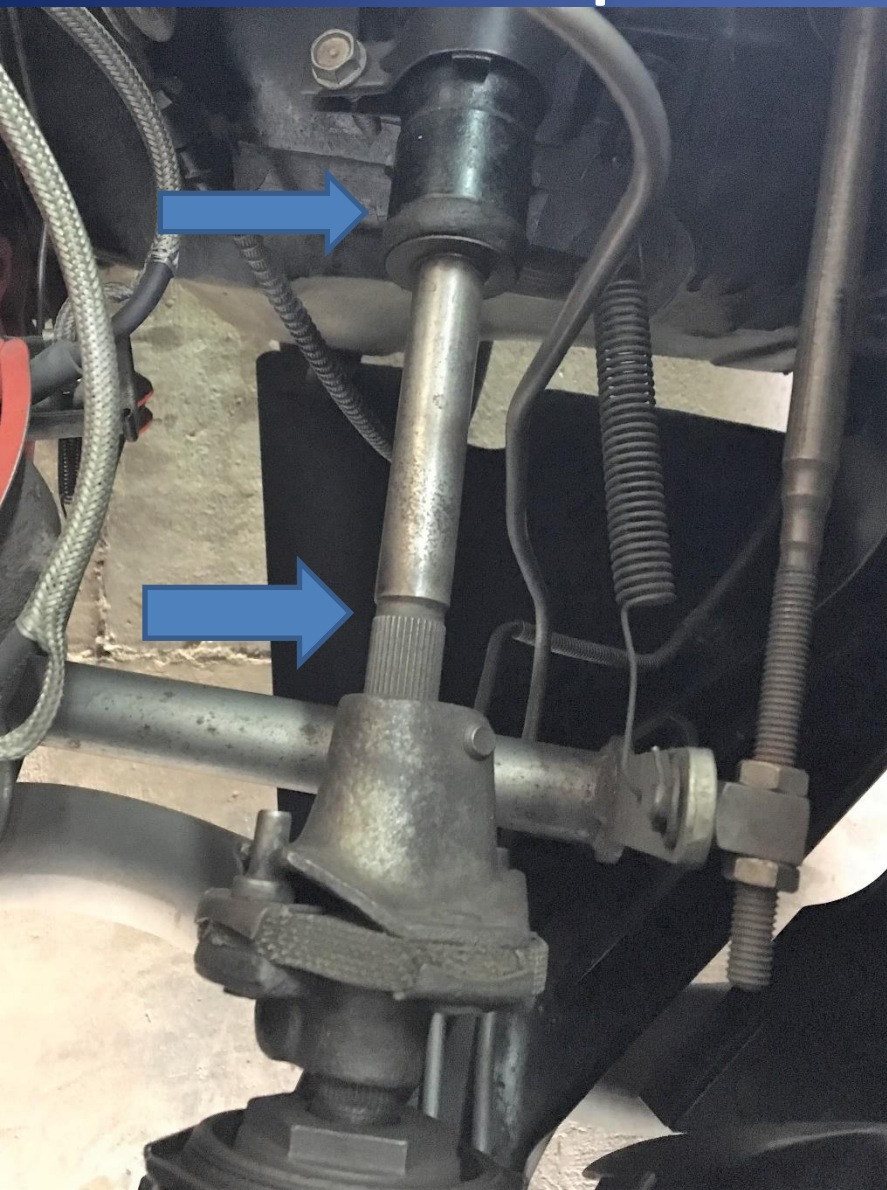
\* Rag painted if steering box painted

Telescopic column both flanges riveted

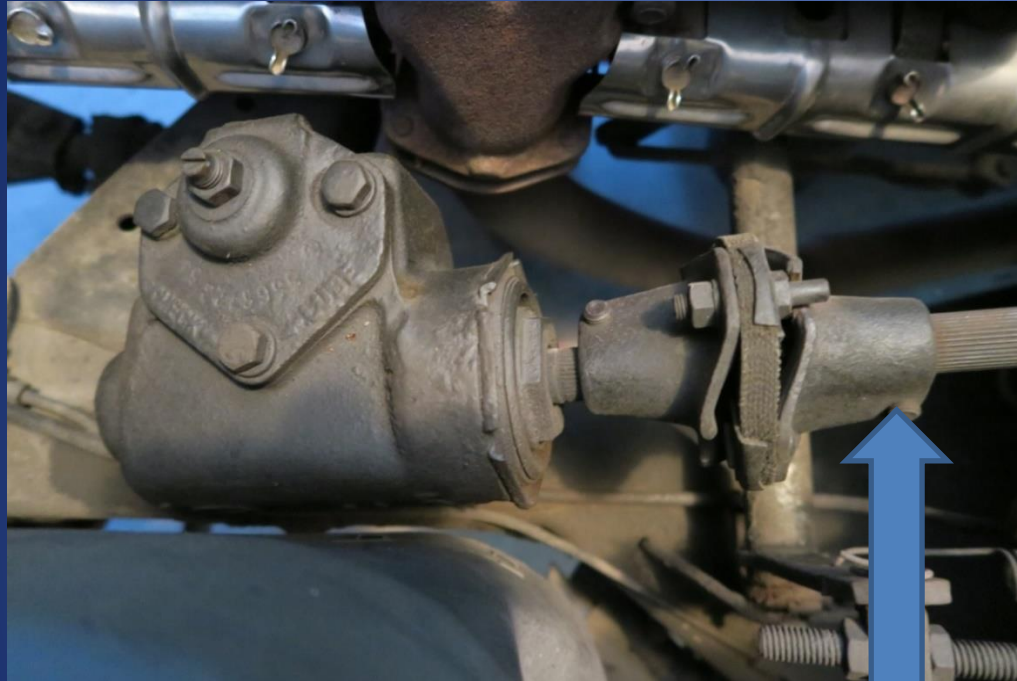
# Coupler 1963-1966 (Rag Joint)



# Telescopic Column & Rag Joint



# Rag Joint



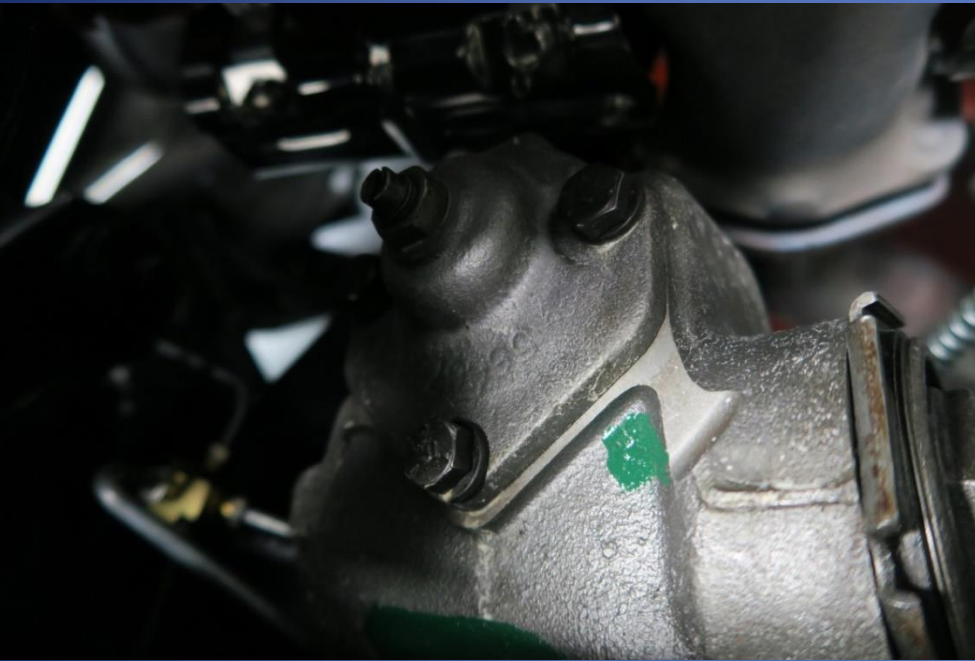
1965 Painted



1967

Typically  
NOT painted

# Steering Gear Box

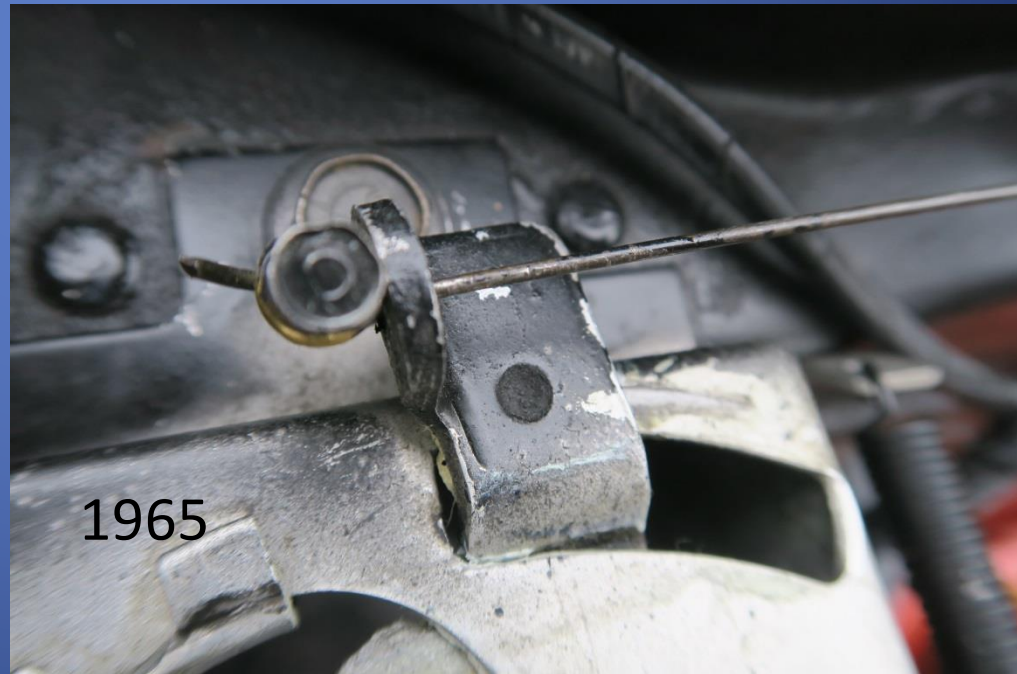


# Power Steering Cap



# Hood Configuration, Black Out

- Black out done **prior** to hood catch installation in 1963 and 64-67 AO Smith
- Black out done **after** hood catch installation in St. Louis cars 64-67



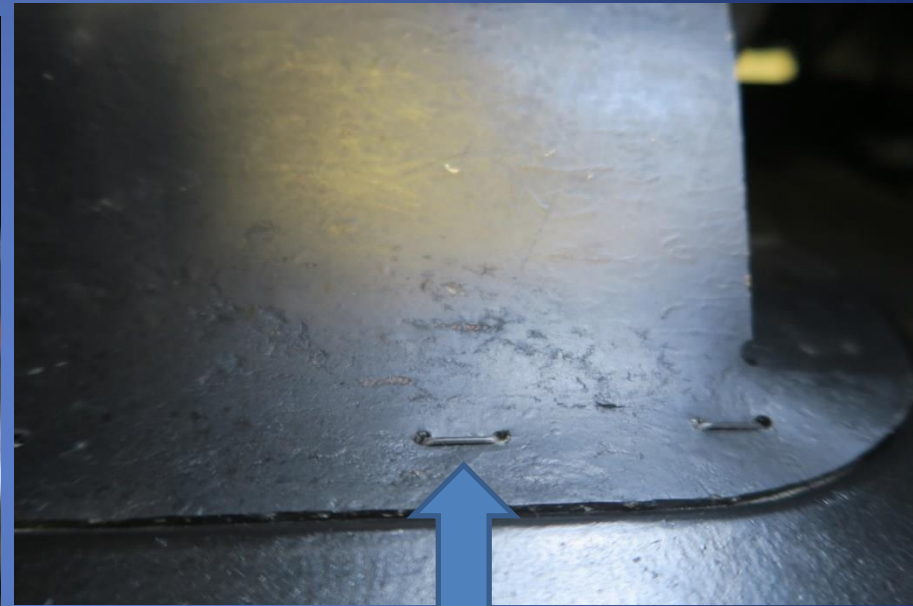
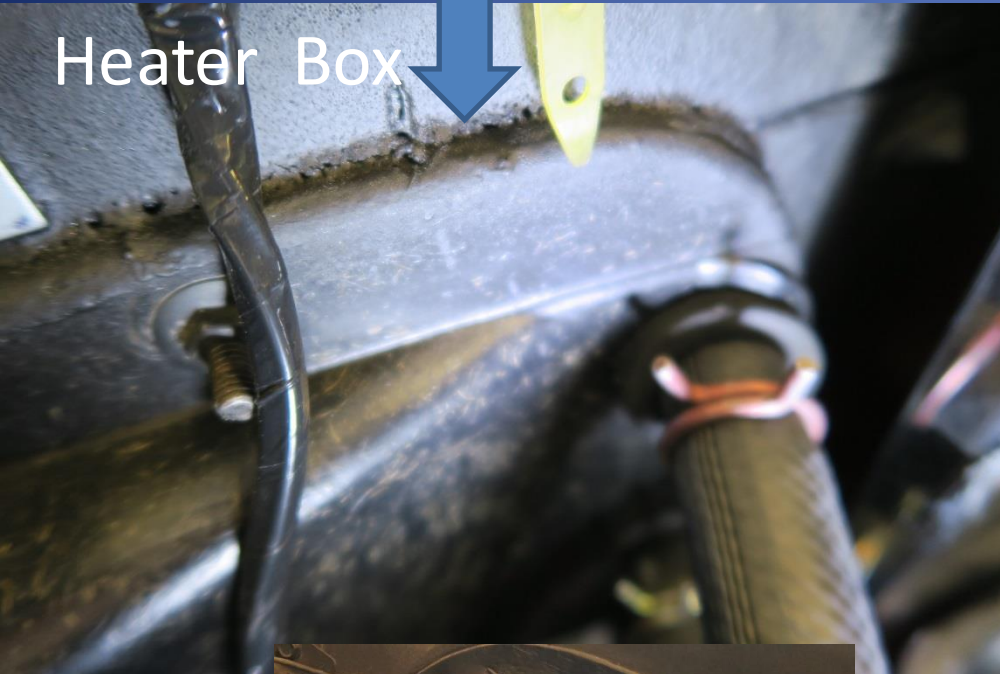


# Blackout



# Inner Fenders, Firewall, Sealing

Heater Box



Dust Shields  
Blacked Out  
Magnetic Staples

# 1963-1965 Passenger Inner Fender



Non AC



AC

# Fender to Surround



1963

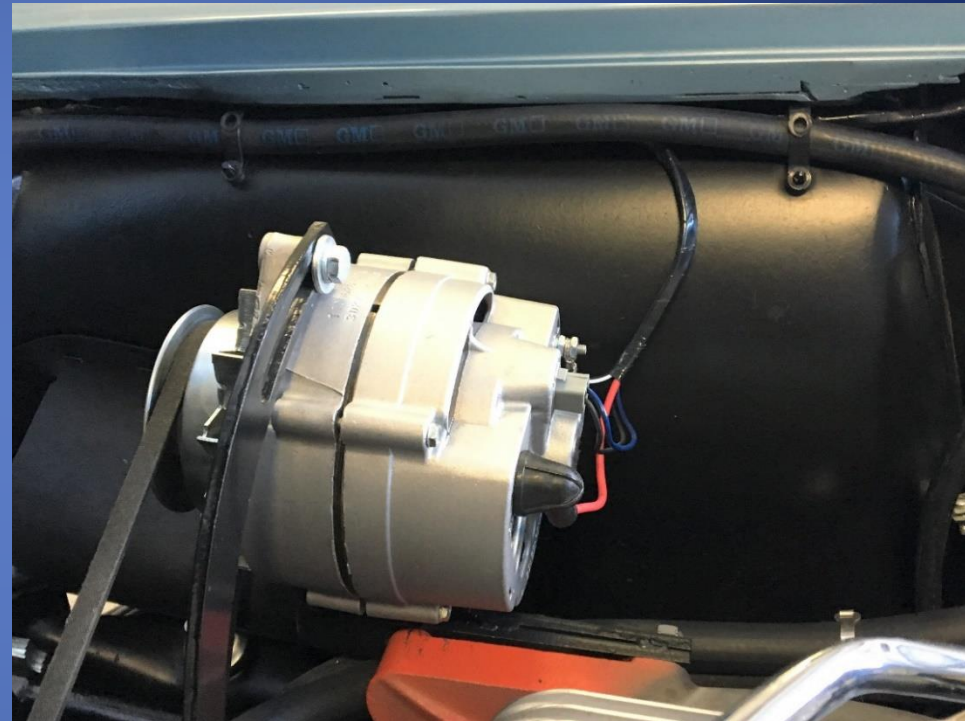


1964-1967

# 1963-65 Inner Fenders



Driver Side



Passenger Side

# Inner Fenders 1966



Passenger Side

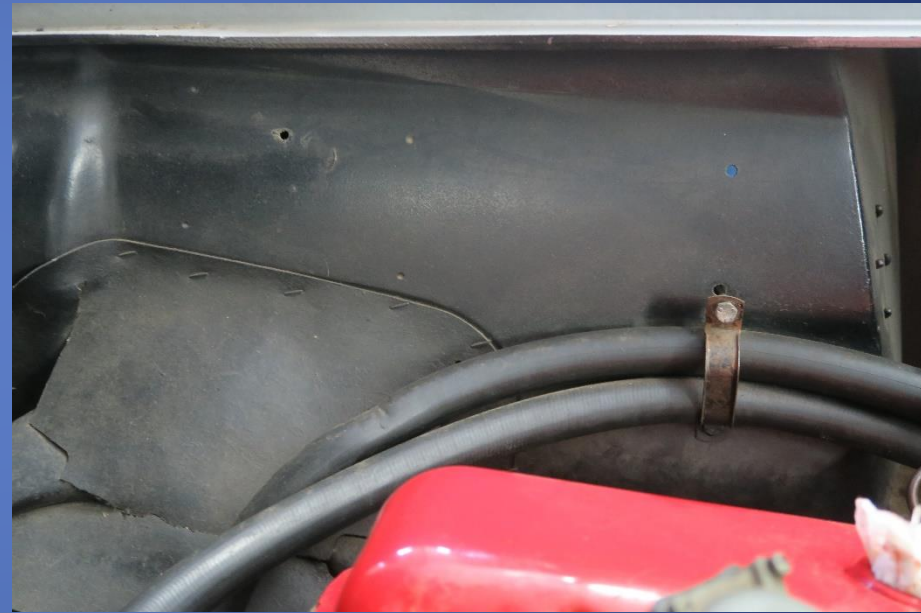


Driver Side

# 1967 Passenger Inner Fender



Small Block



Big Block

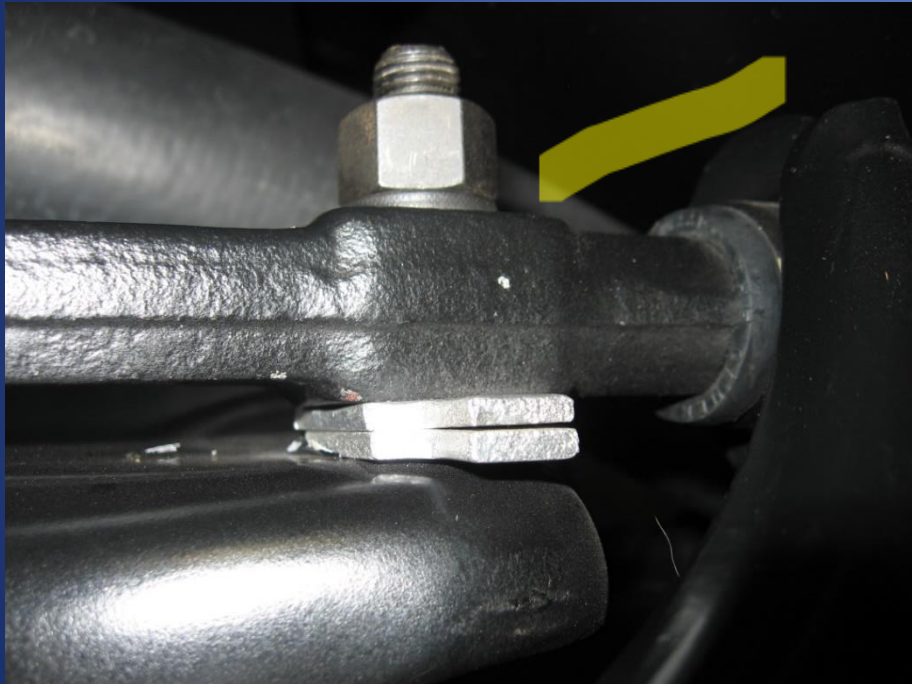
# Upper A-arms and Shock



# Heavy Duty Sway Bar Z06



# Upper A-arms Cross Shafts

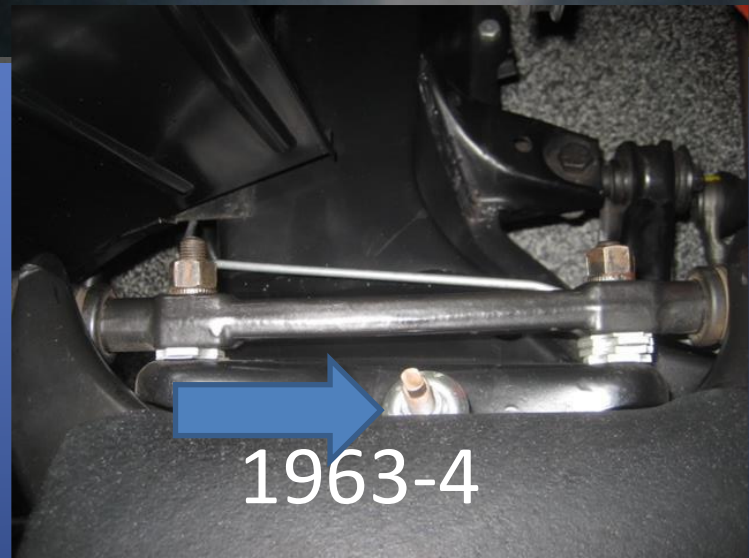
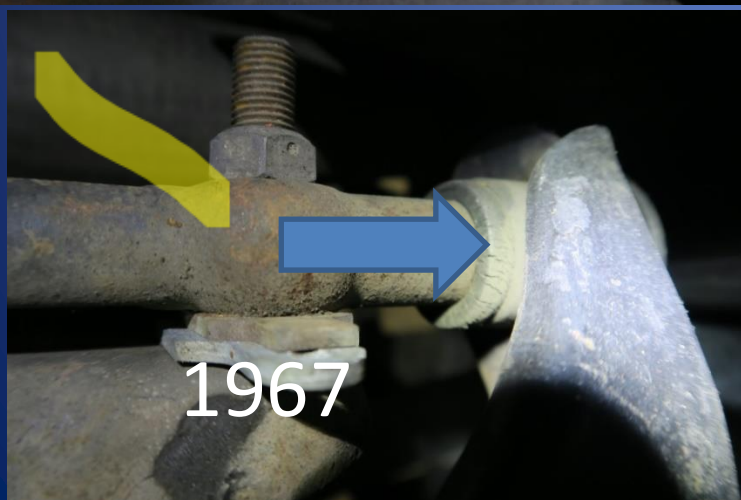
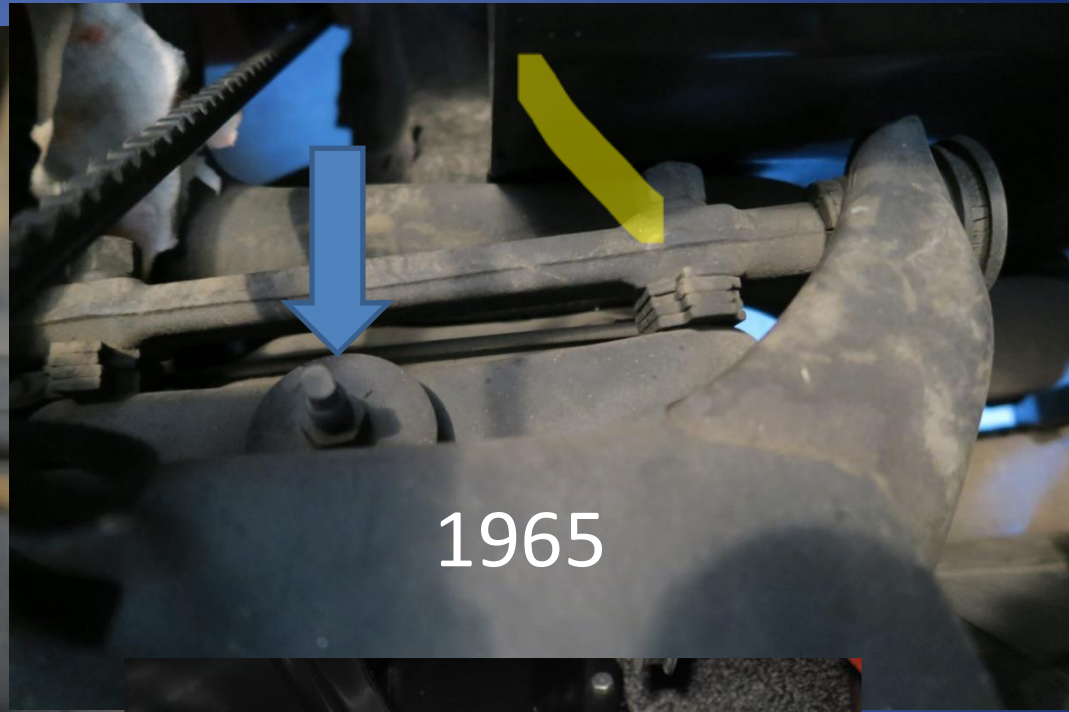
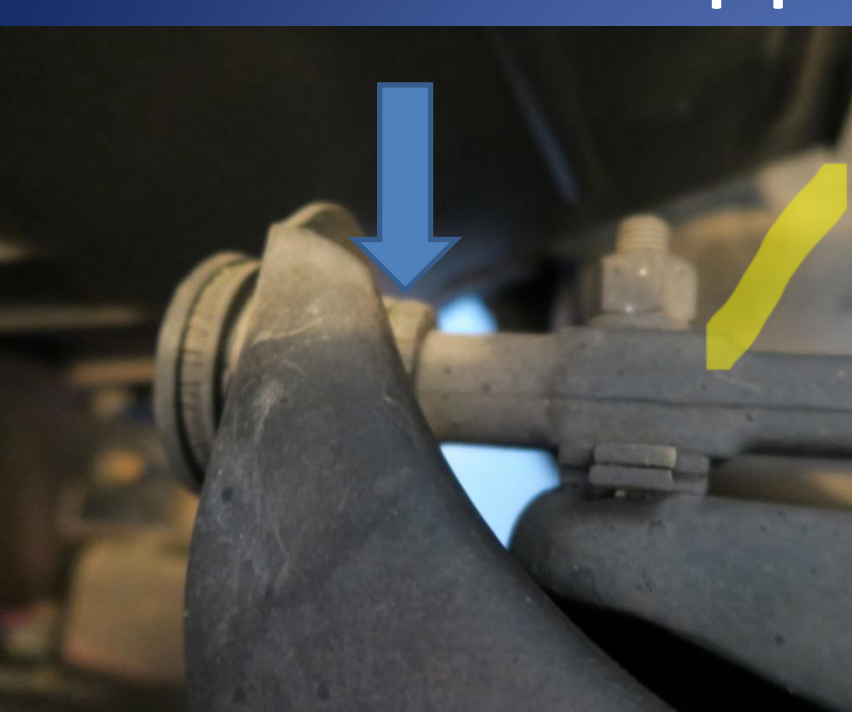


1965

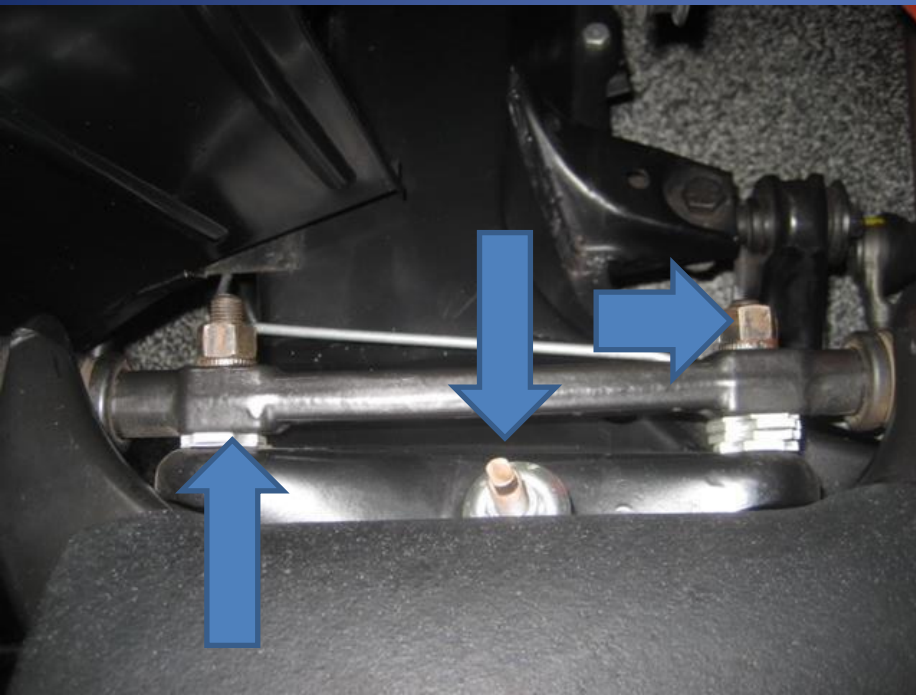


1966

# Upper A-arms



# A-Arm Cross Shafts

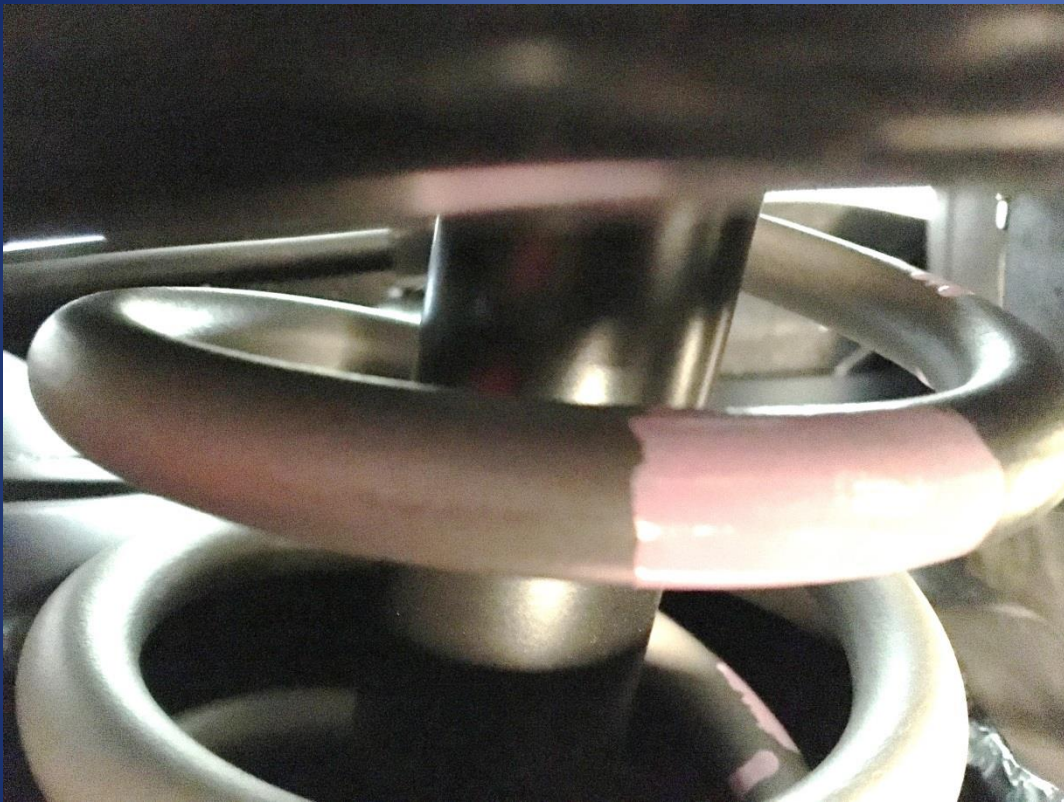


1963-1964



1967

# Front Shocks



1963

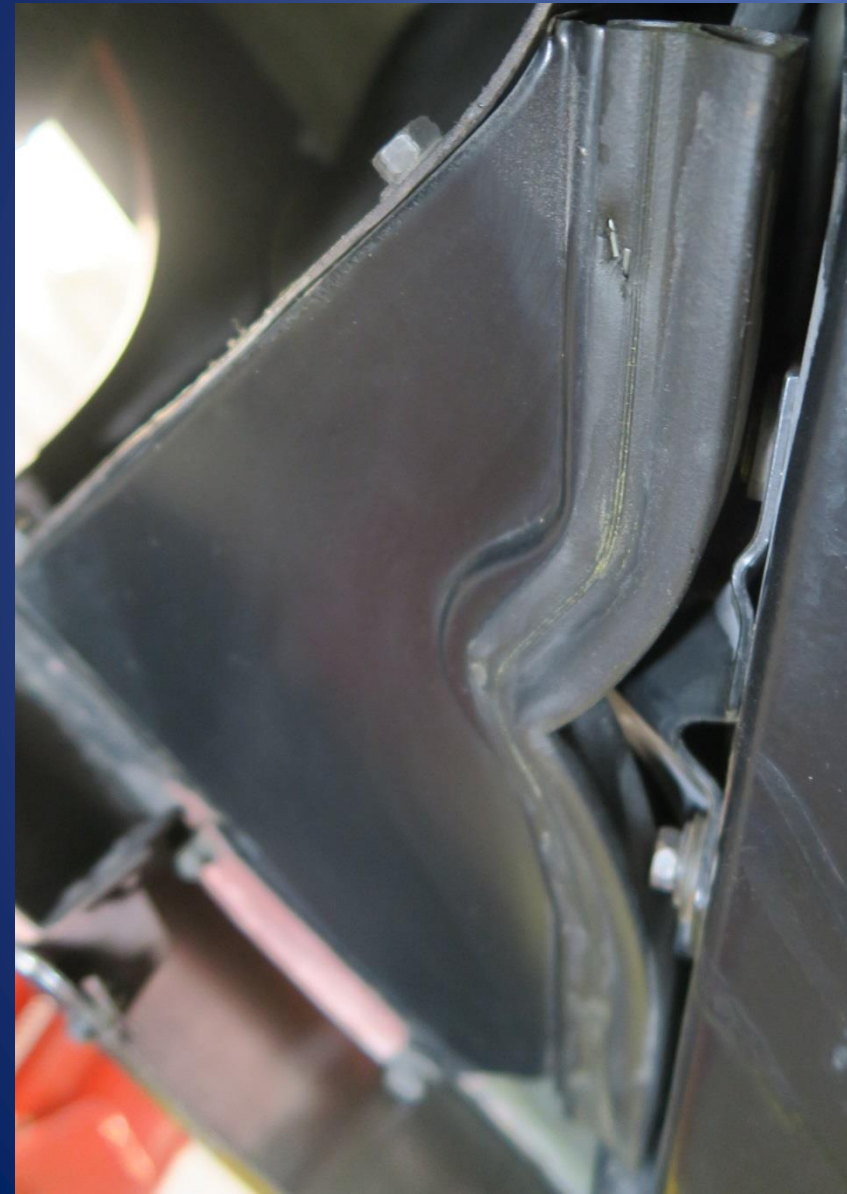


1964-1967

# Front Shocks



# Splash Shields



# Splash Shields 1964-1967



# Hood Weatherstrip

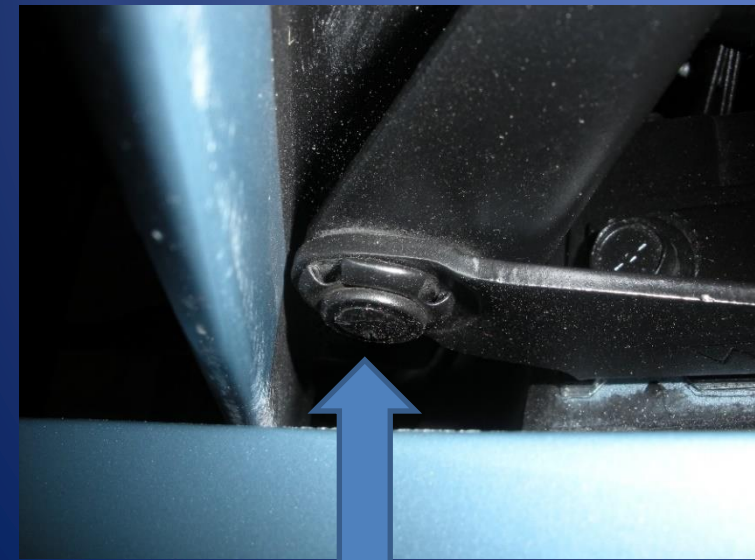
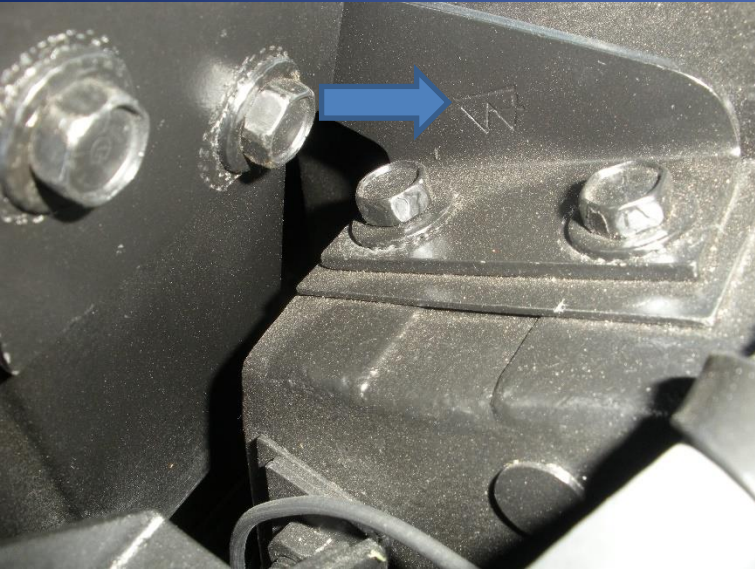


1963-1964



1965-1967

# Hinges and Hood Support

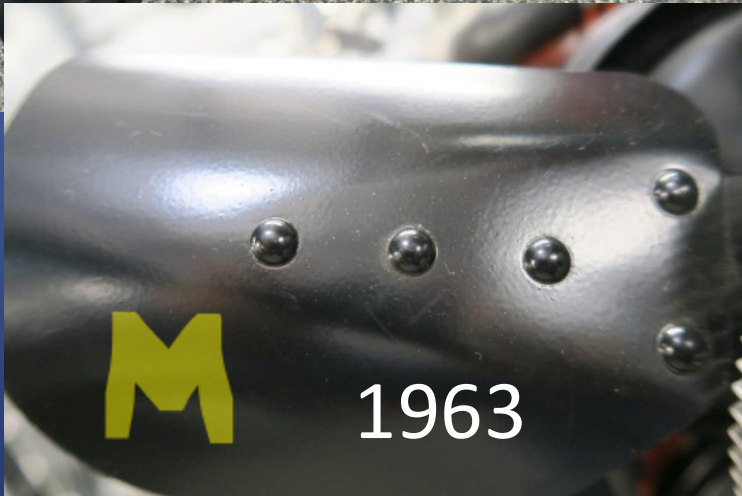


# Fan

Year	No.	Rivets	Size (in.)
1963	3770529	button	17 1/8
1964	3770529	flat	17 1/8
1965	3770529	flat; "W"	17 1/8
1966	3770529	flat; "W"	17 1/8
1967*	3770529	flat; "W"	17 1/8

\* Triangular blade

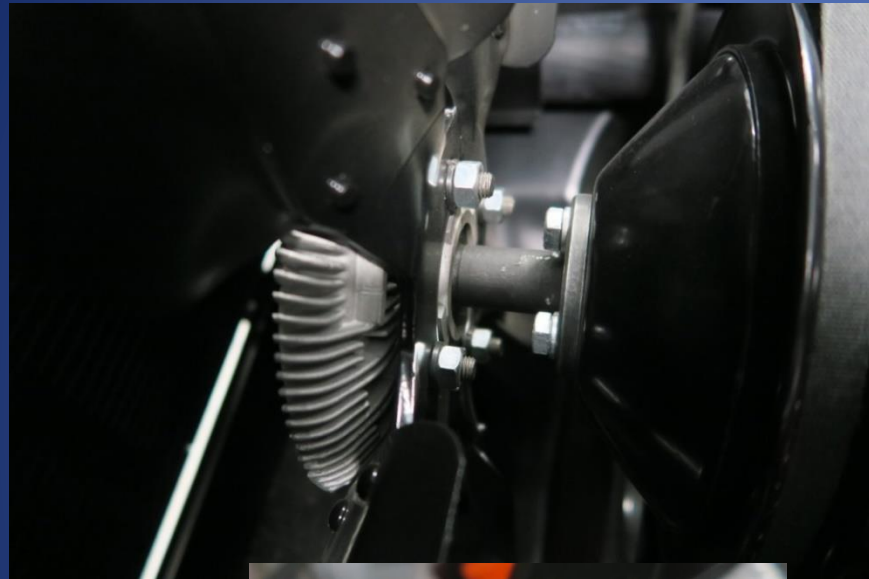
# Engine Fan



# 1965 AC Fan



# Fan Clutch

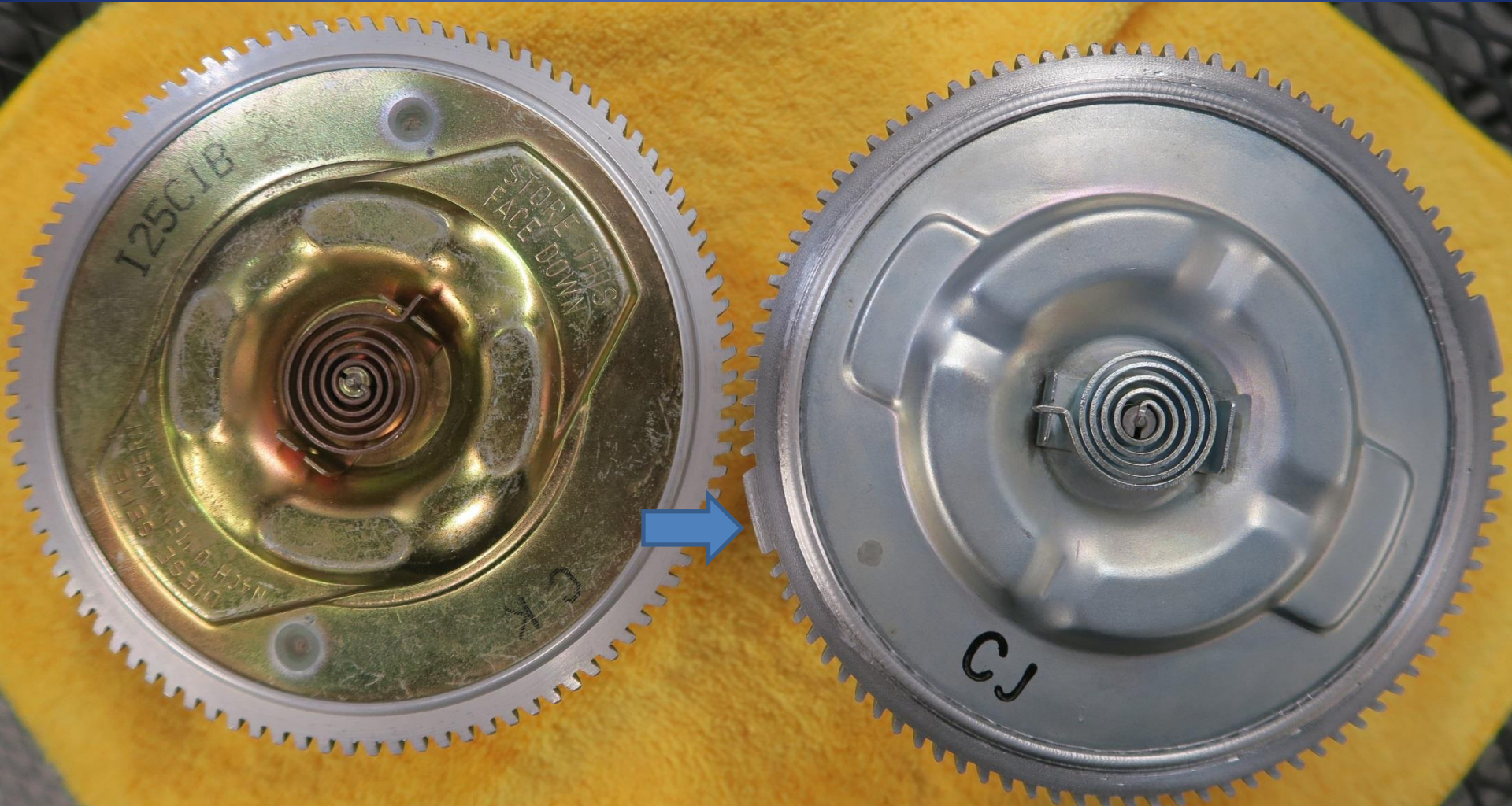


# Eaton Fan Clutch

Typically Dated



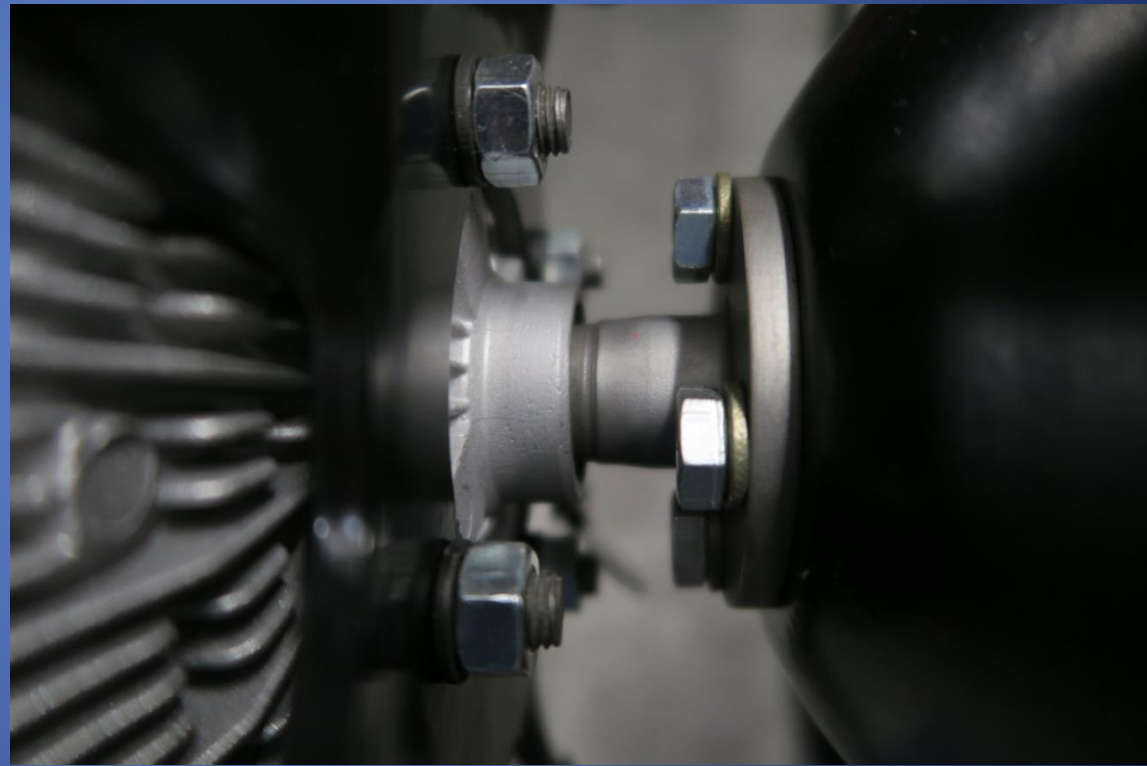
# Eaton Fan Clutch



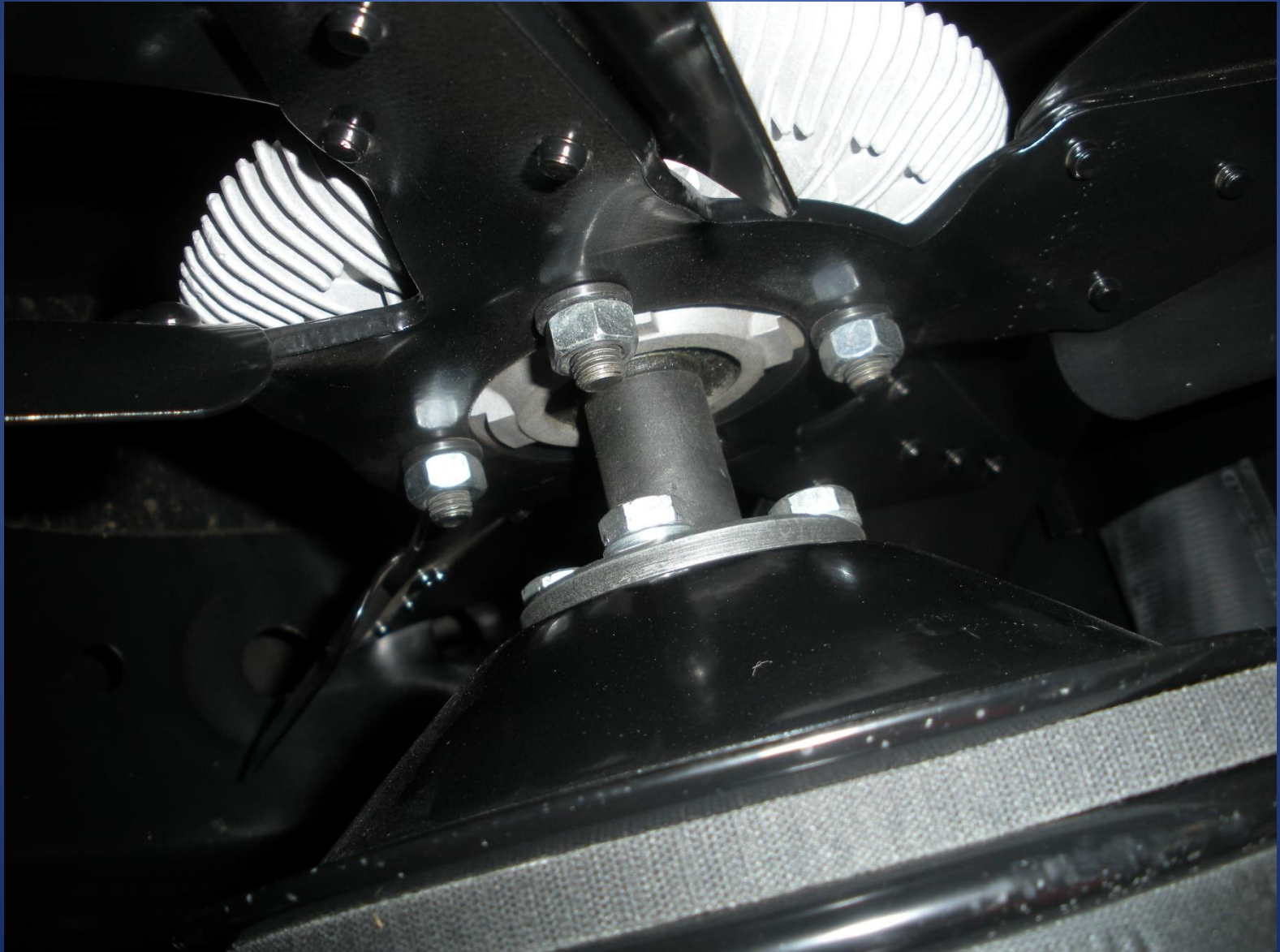
Replacement

Original

# Schweitzer Fan Clutch



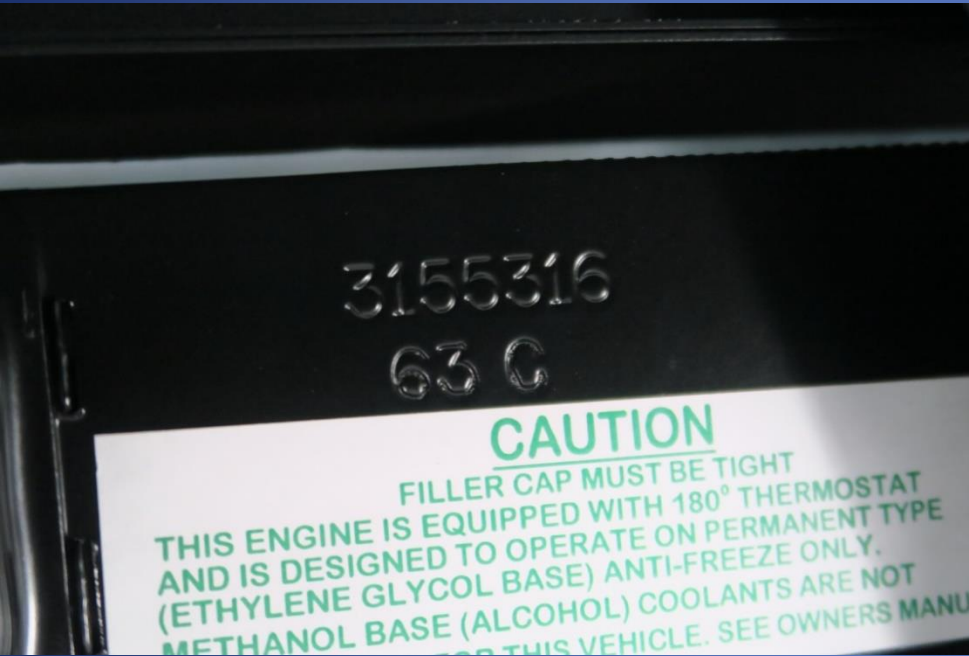
# Fan & Fan Clutch Mounting



# Radiator



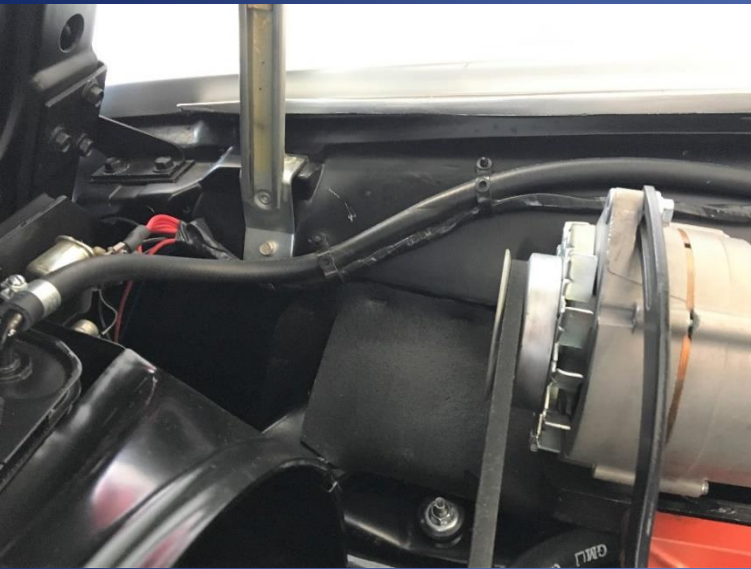
# Radiator Labels



# Expansion Tank

Year	Nipple	Mount	Balance Hose Routing
1963	Pressed	Fiberglass	Inboard (Early)
1964	Welded	Steel	Outboard
1965	Welded	Steel	Outboard
1966	Welded	Steel	Outboard
1967	Welded	Steel	Outboard

# Balance Hose Routing

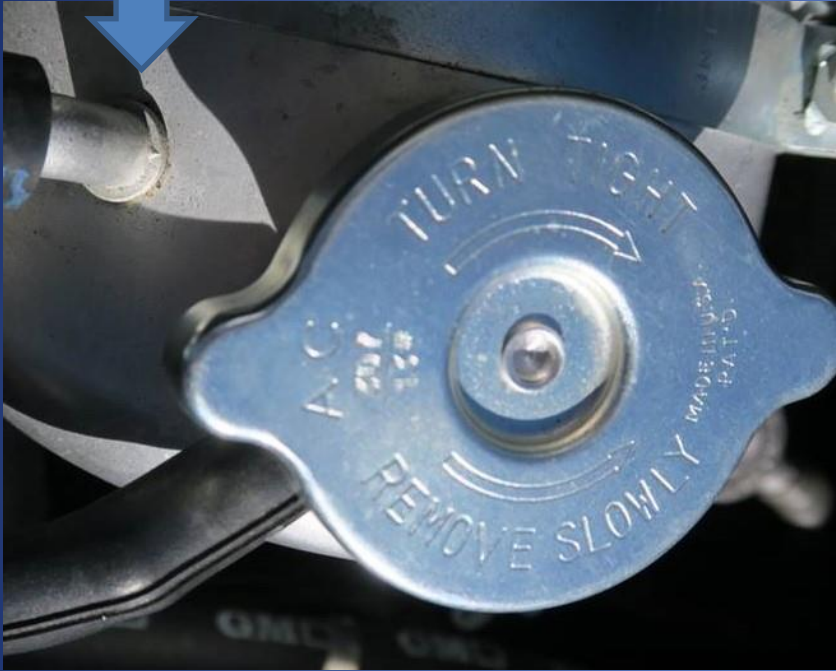


Early 1963 to VIN 8000

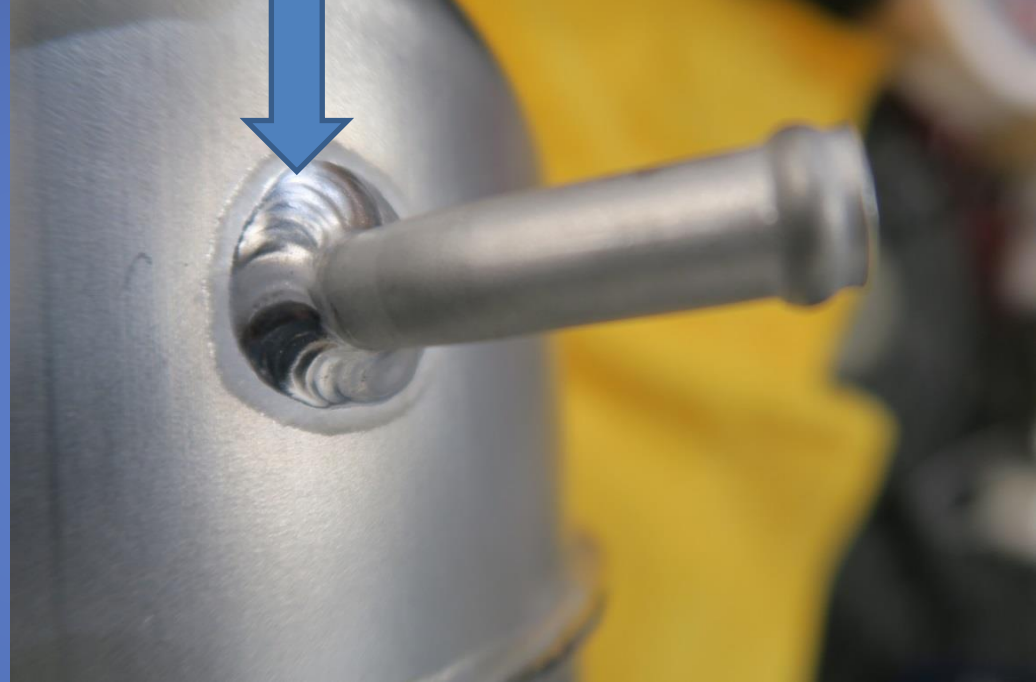
Late 1963-1967



# Expansion Tank



1963



1964-1967

# Small Block Radiator Cap

Year	PSI	Number	Special
1963	13	307*	No Circle
1964	13	307	Circle
1965	13	307	No Circle
1966	15	RC26	
1967	15	RC26	

\*No circle around 307 until August



# Expansion Tank



Original



# Fan Shroud

Year	Material	Bolts
1963	Metal	6 Zinc
1964	Metal	6 Zinc
1965	Metal	6 Zinc or black phosphate
1966	Fiberglass	4 Zinc
1967	Fiberglass	4 Zinc

# Fan Shroud

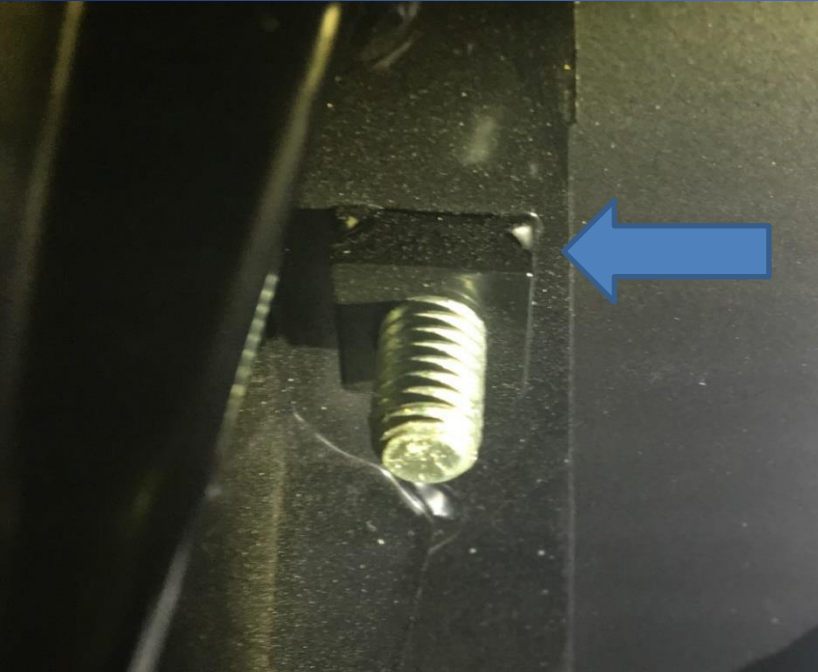


1963-1965

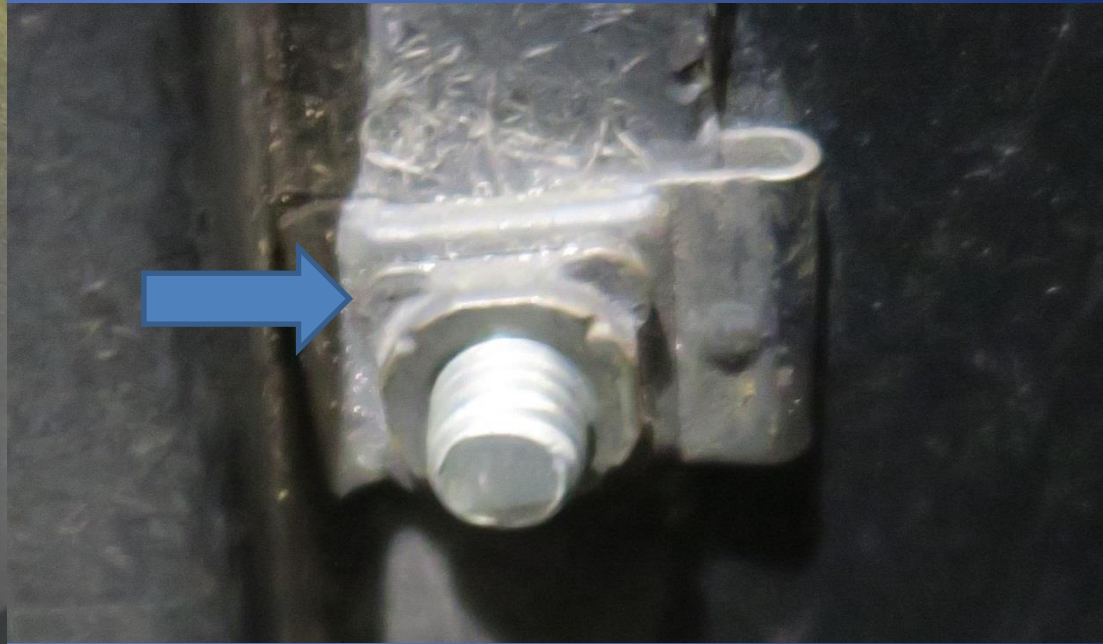


1966- 1967

# Fan Shroud Nuts

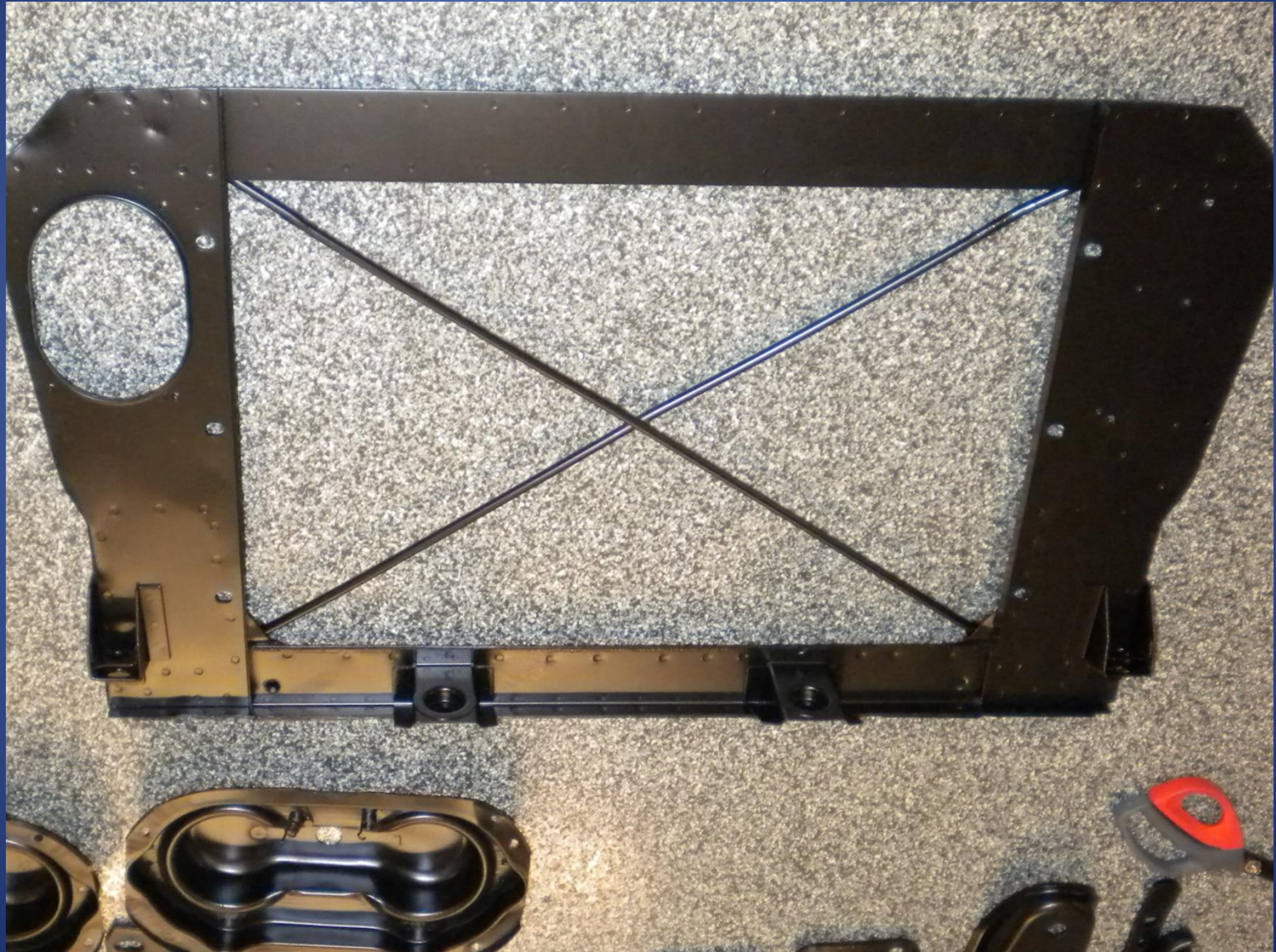


SB 1963-1965

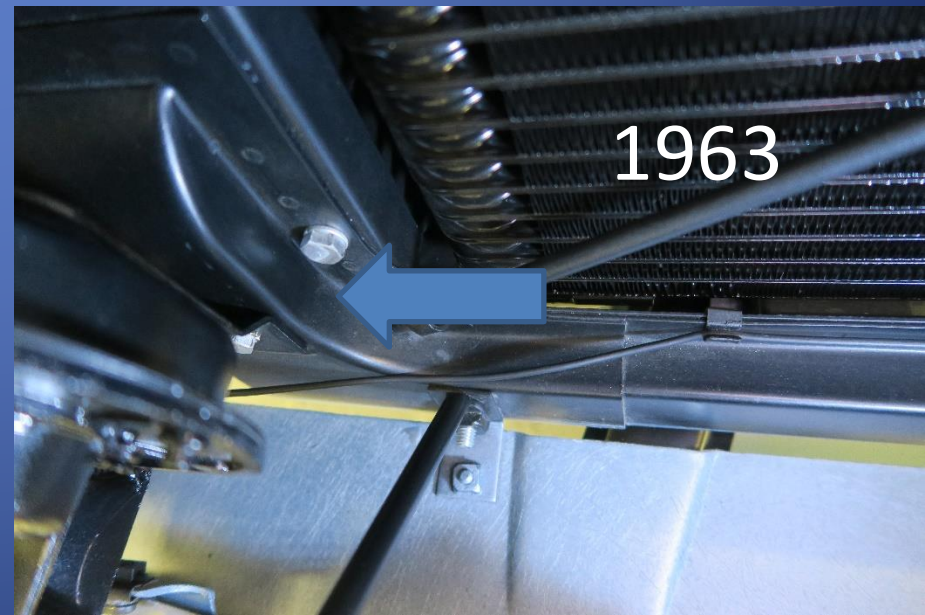


1966-1967

# Core Support



# Core Support



# Front Valence



# Horns

Year	Left No.	Right No.	Date
1963	9000455	9000456	YMW
1964-67	9000487	9000488	YMW

# 1963 Horns



455 Left  
456 Right

# 1963 Horns



Driver side  
Low note



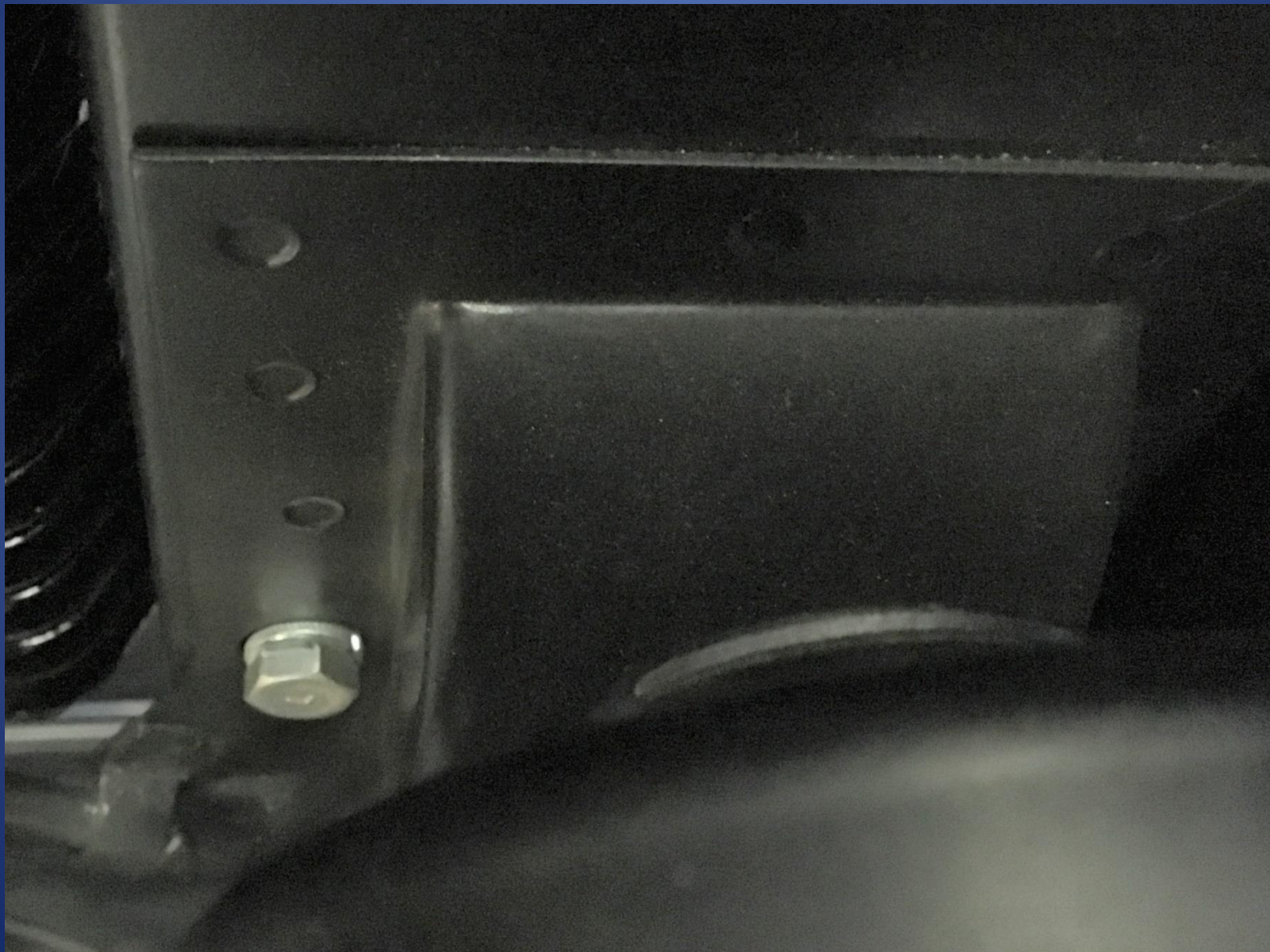
Passenger side  
High note



# Horns 1964- 1967



# Horn Mounting 1963



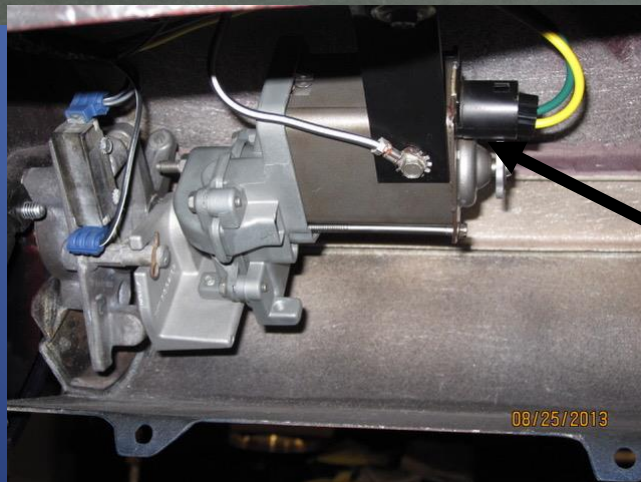
# Horns 1964-1967



# Headlight Motors

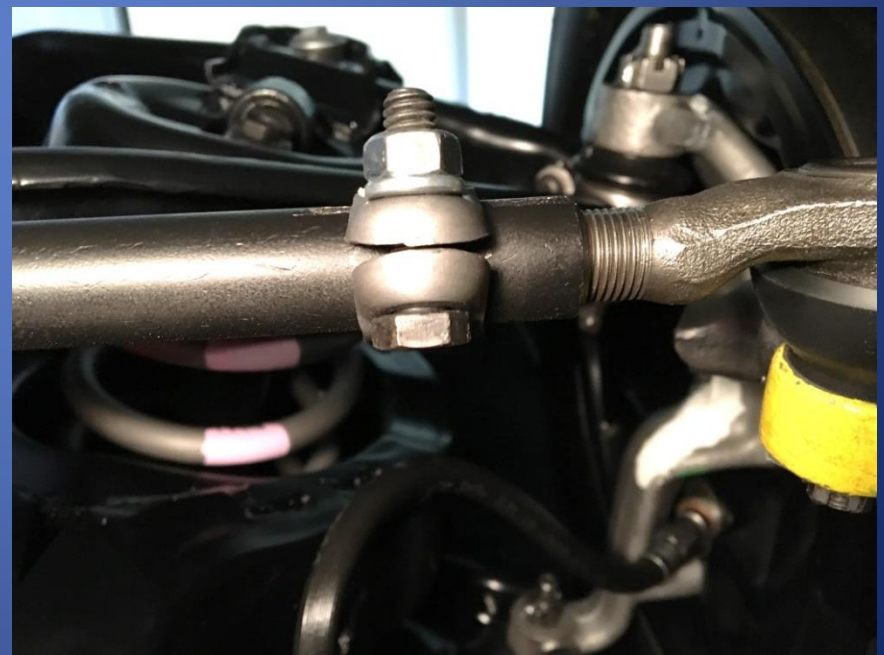
- Dated: Month Year
- Black ground wire sequence: motor, bracket, **star washer**, ground wire, bolt

# Headlight Motors



1963 Black

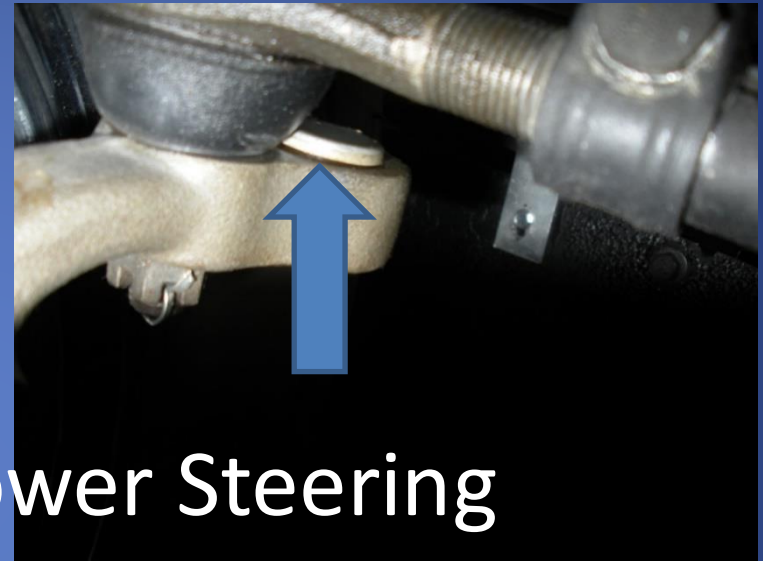
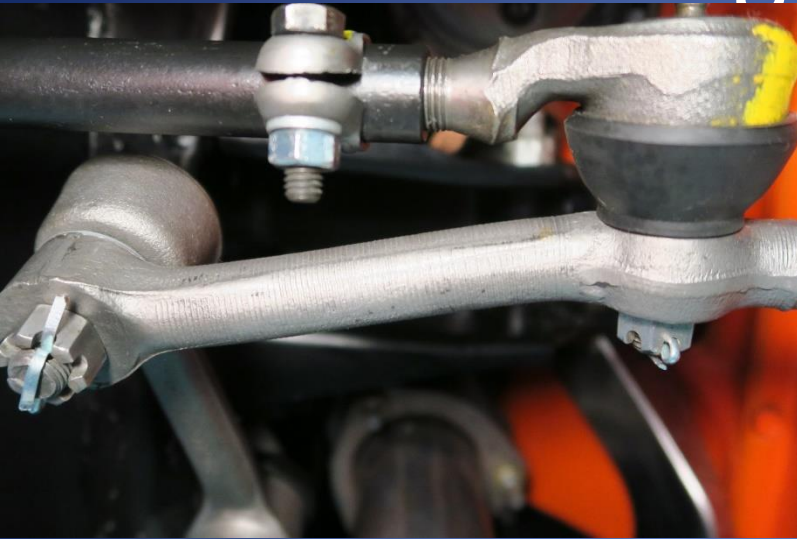
# 1963-1964 Steering Linkage



# Steering Linkage 1965-1967



# Steering Arm to Tie Rod



Power Steering

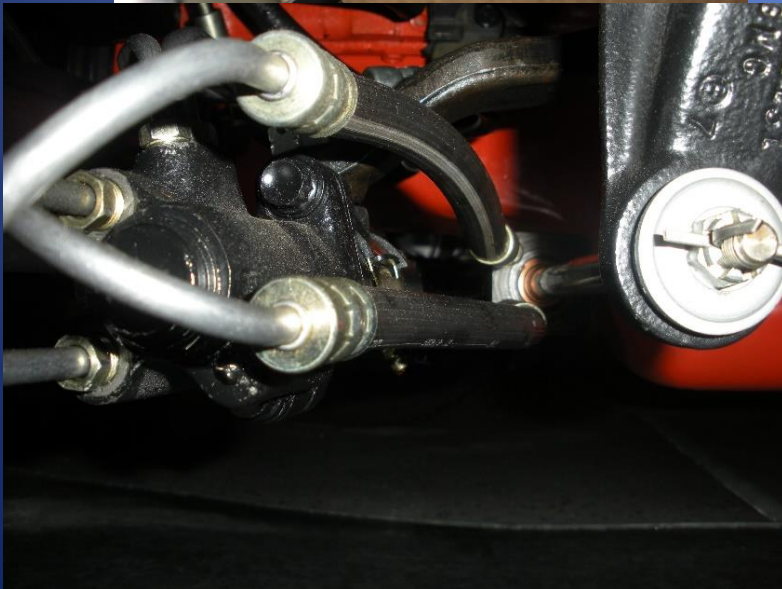


Manual Steering



Z06

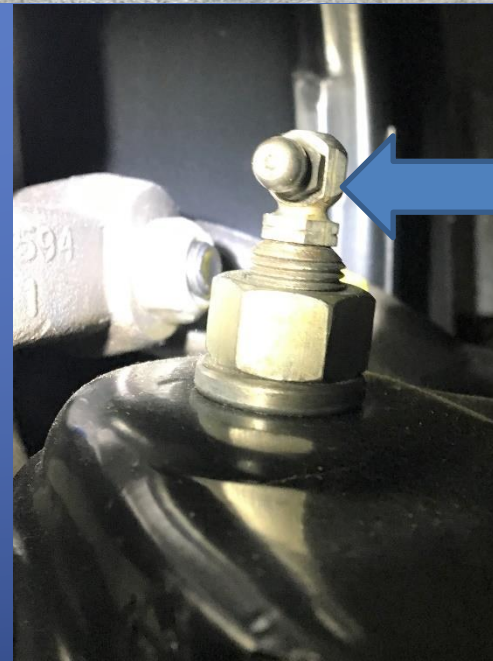
# Power Steering



# A-arms, Cross Shafts



# Lower A-arms, Sway Bar



1963 &  
64 to  
VIN  
11000

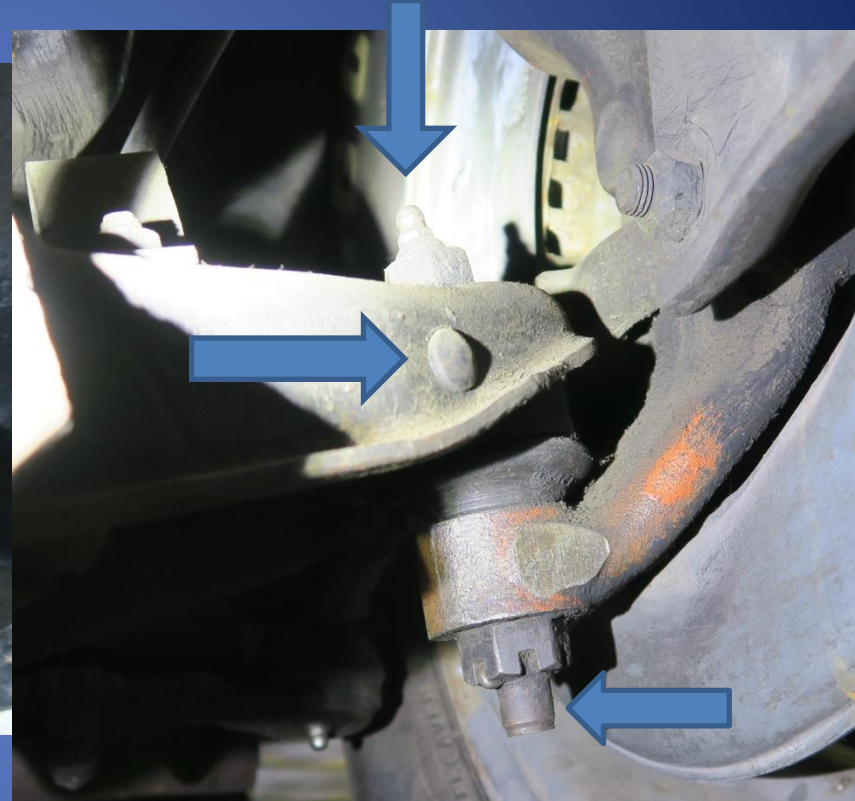
# 1963 Lower A-arm



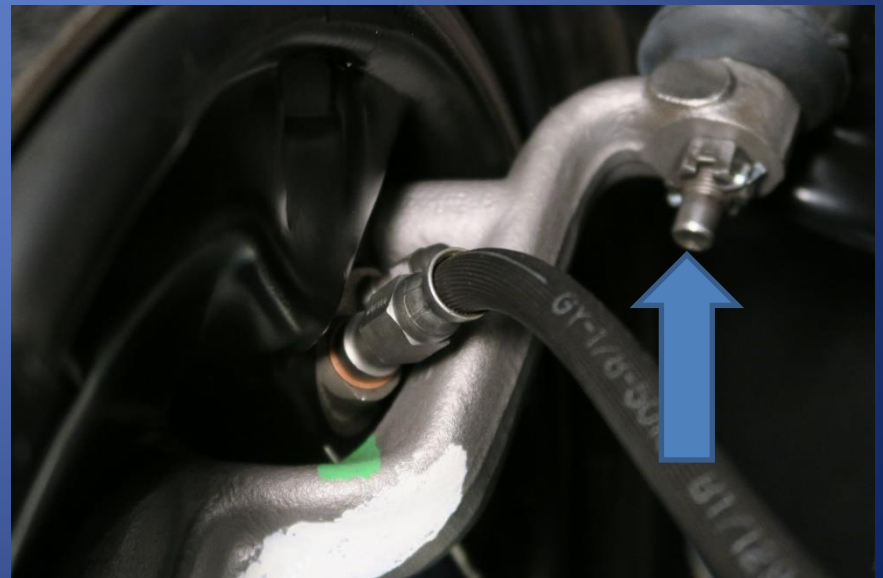
# 1964- 1967 Lower A-arm



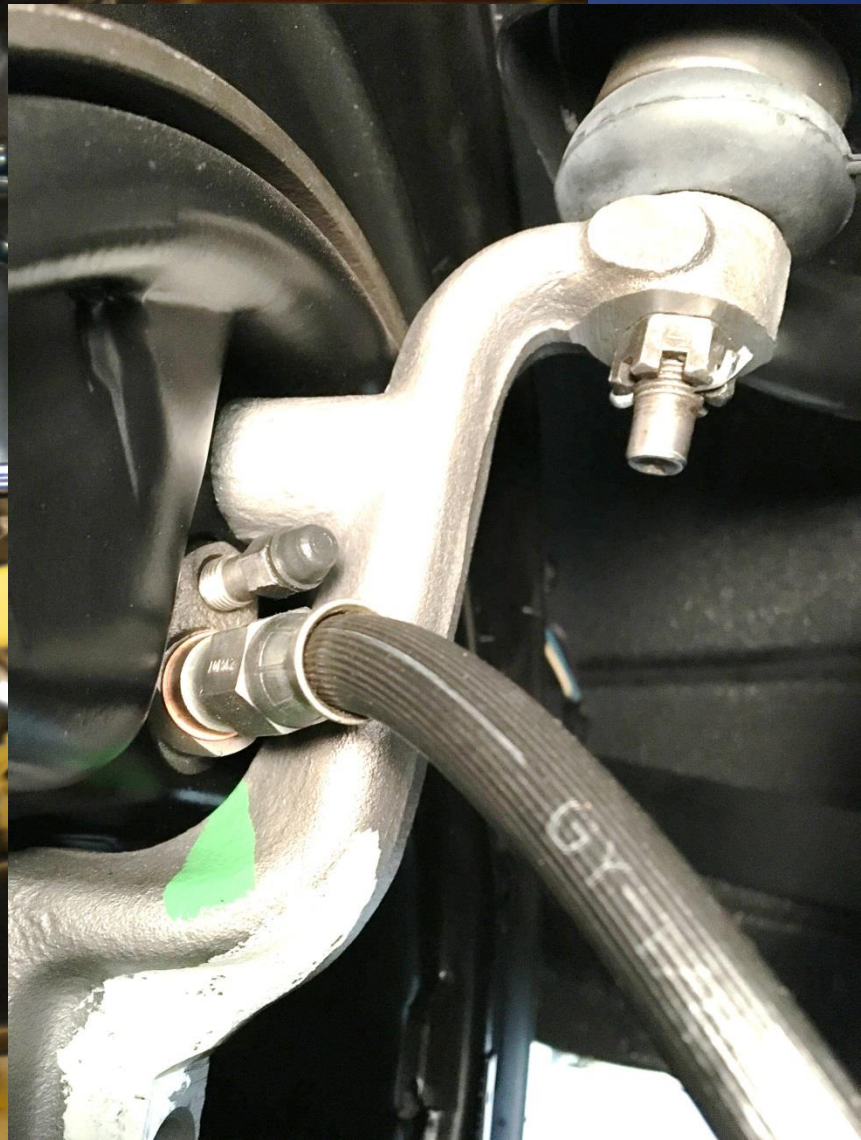
Reinforced



# Ball Joints Riveted



# Knuckles, Spindles

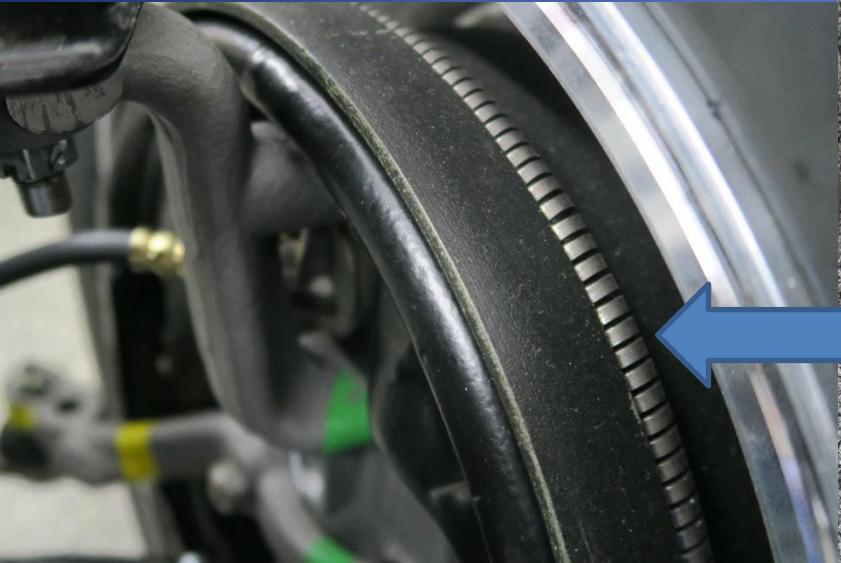


# Brakes

Year	Type	Features
1963	Drum	Flat Front anti-rattle spring
1964	Drum	Round Ft. anti- rattle spring
1965	Disc or Drum	
1966	Disc	
1967	Disc	



# Brake Drums



Front Anti-rattle Spring



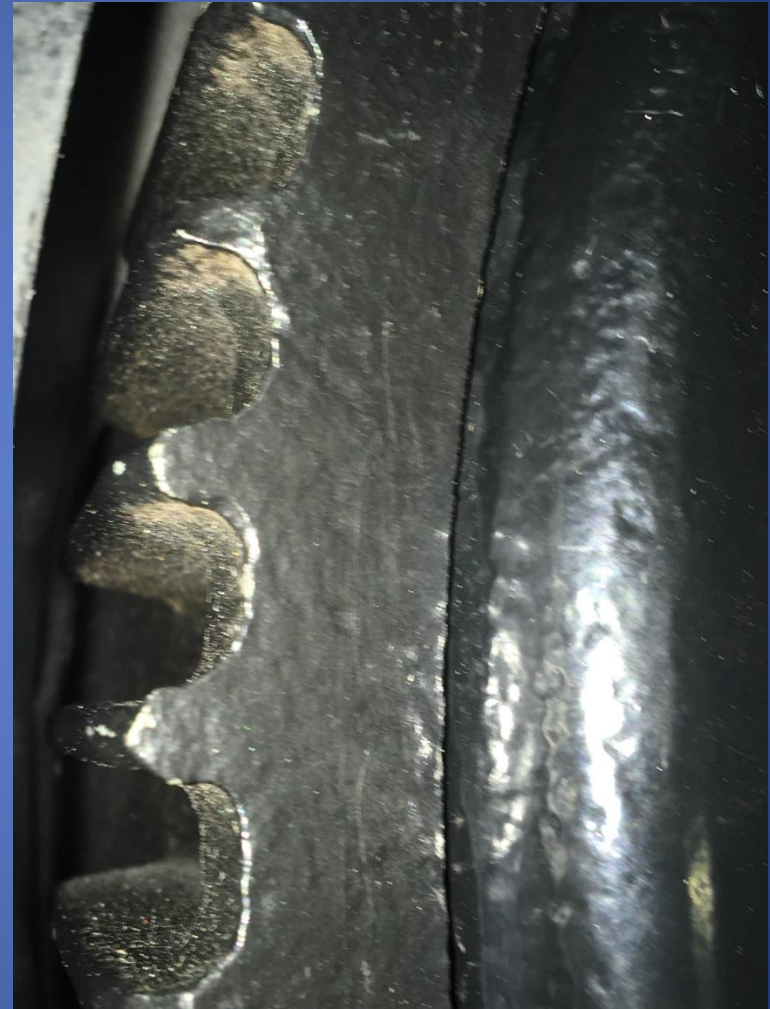
Front

Rear

# Z06 Brakes

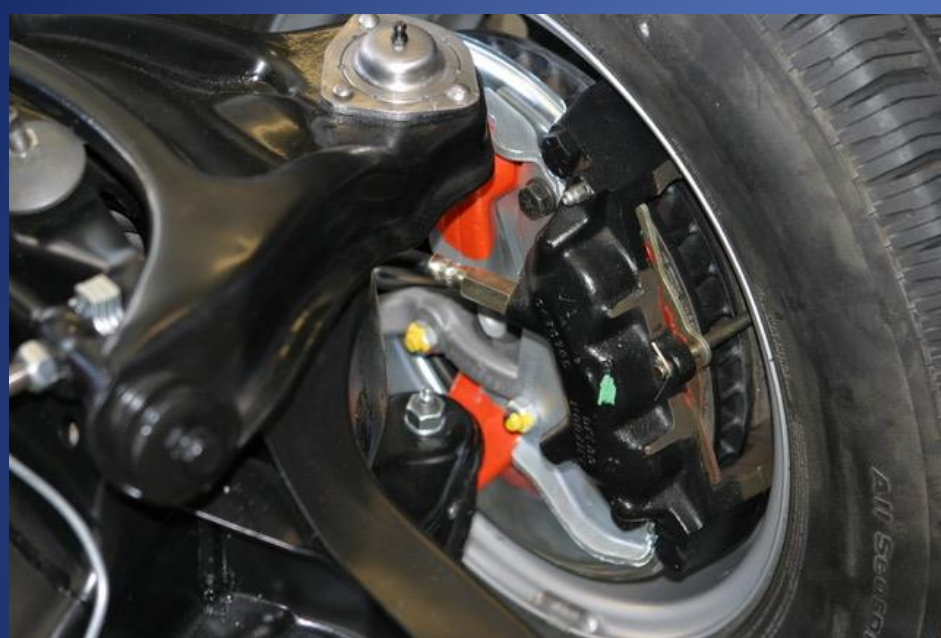


Front



Rear

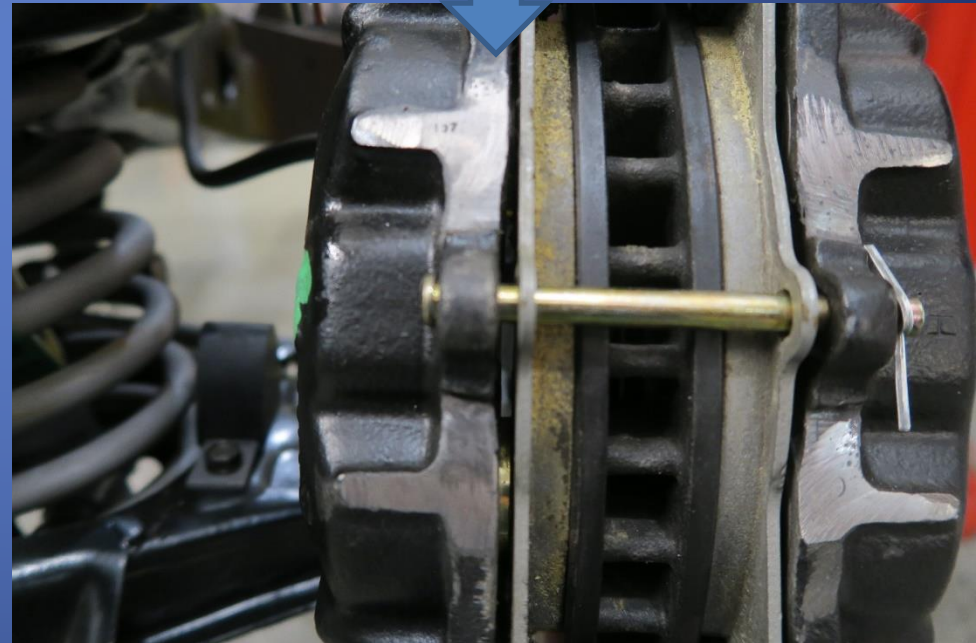
# 1967 Disc Brakes



Service replacement brake lines



# Machined Areas NOT Painted

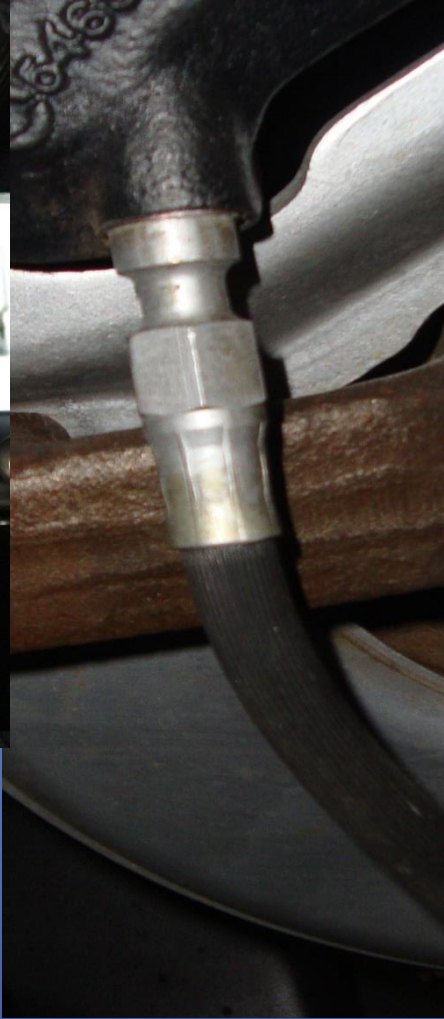


# Rear Brake Dust Shields



1963

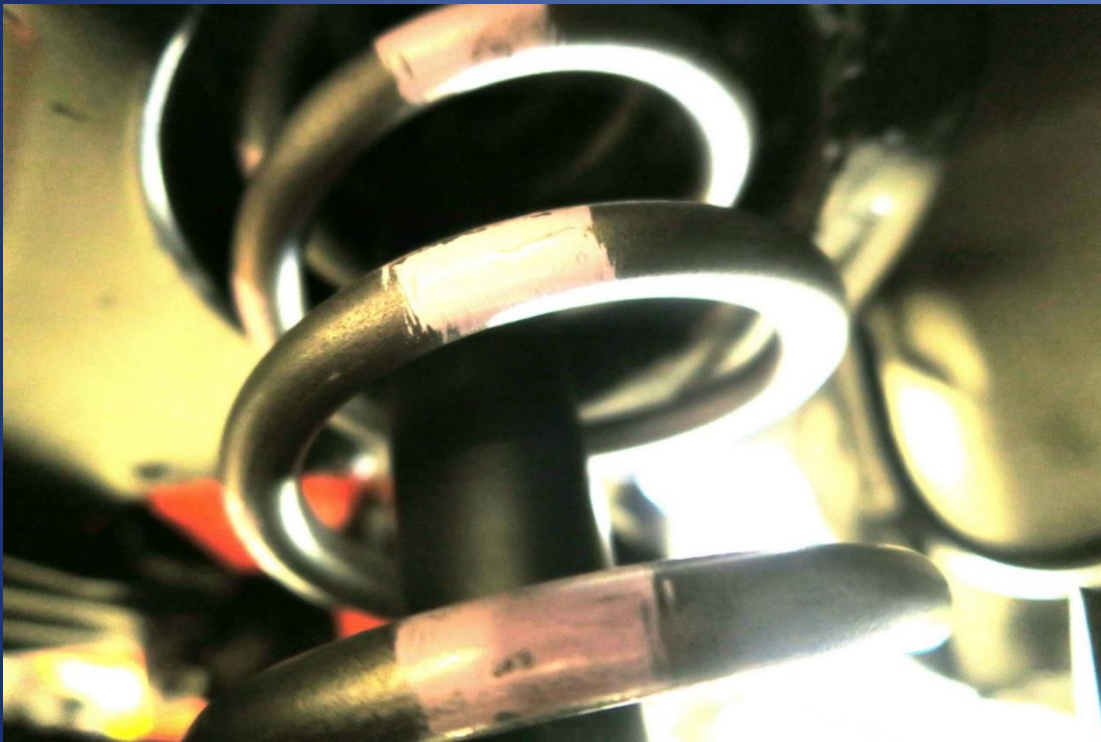
# Brake Lines



1965

1967

# Front Springs

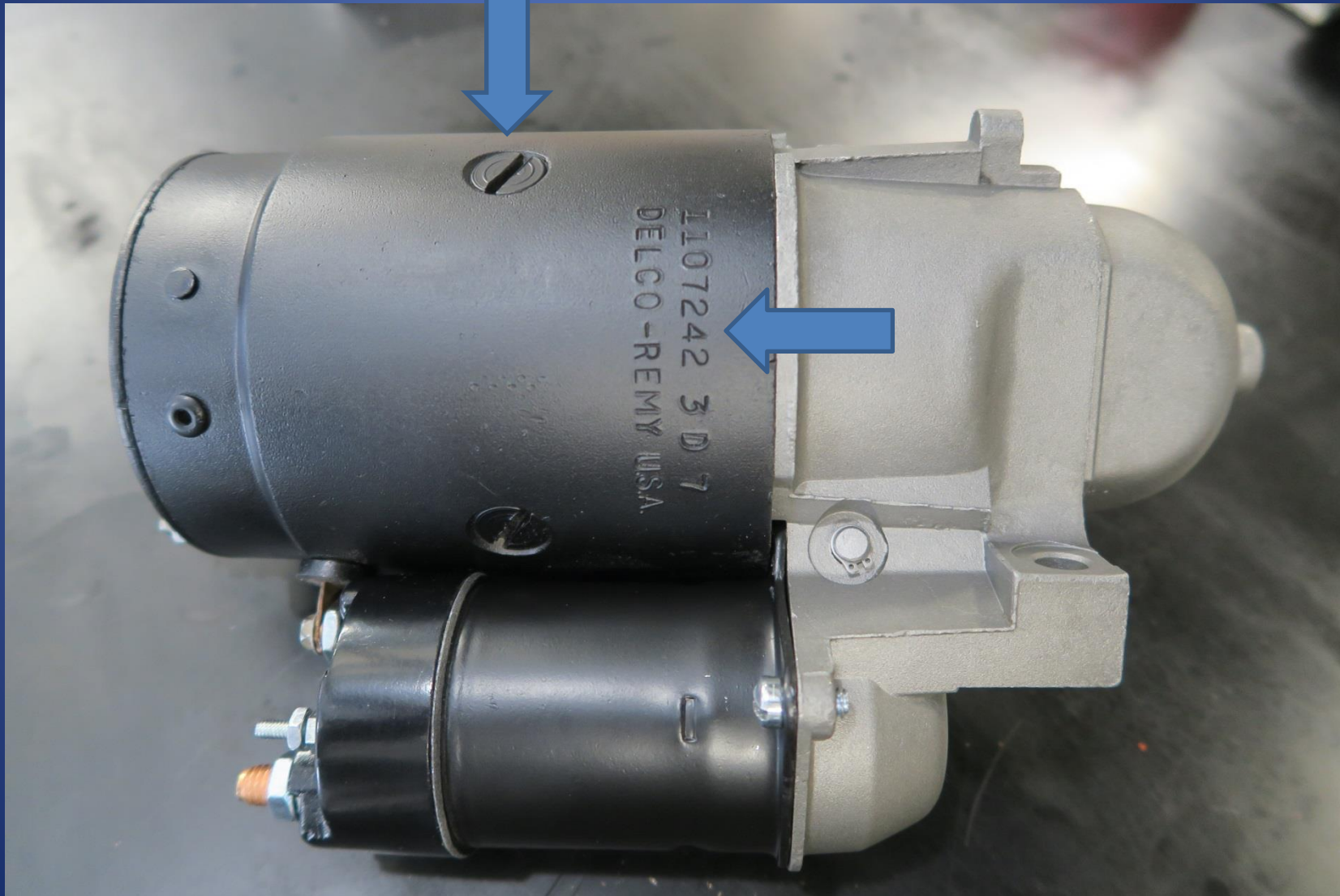


1963

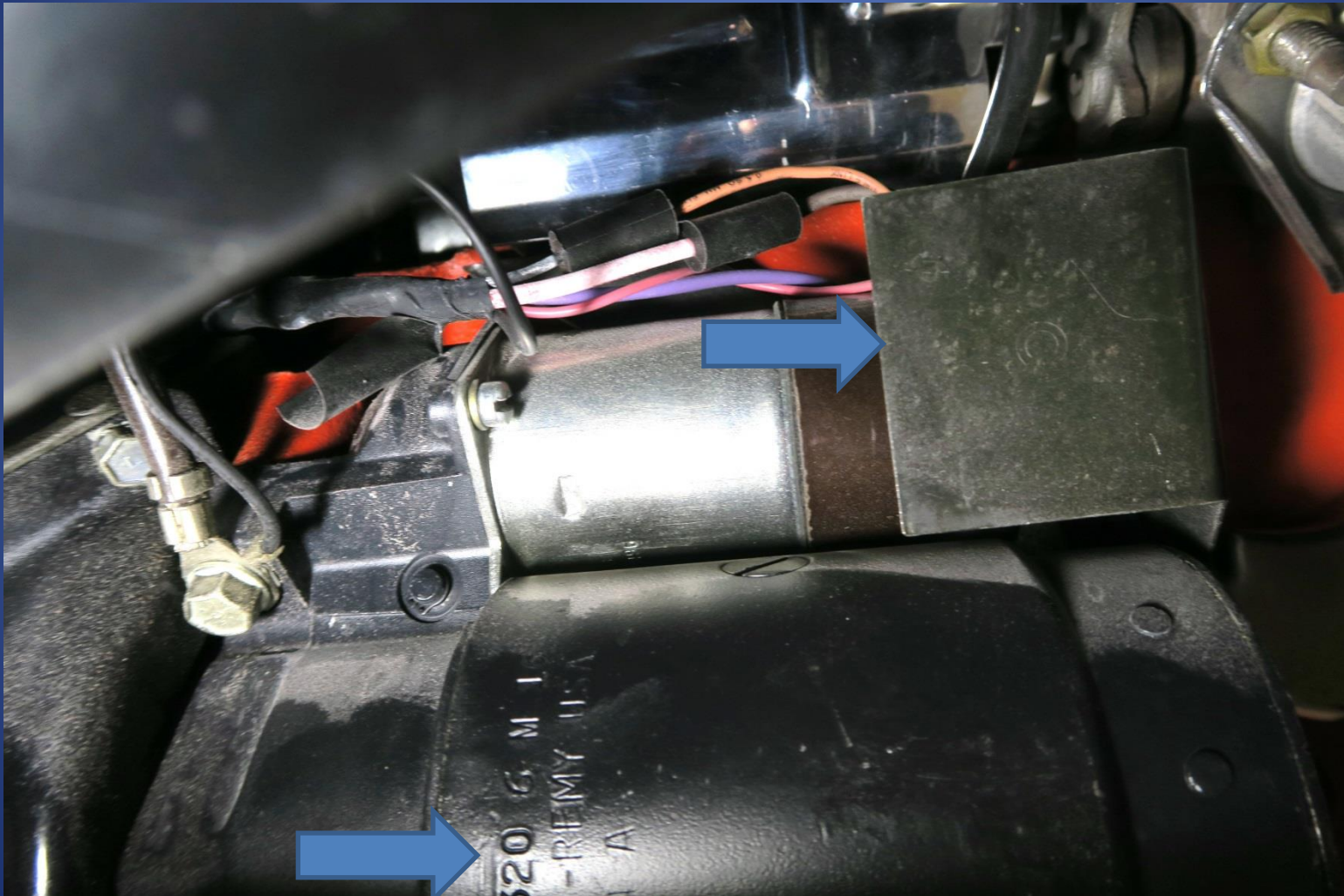


1964-1967

# 1963 Starter Motor



# Solenoid Heat Shield

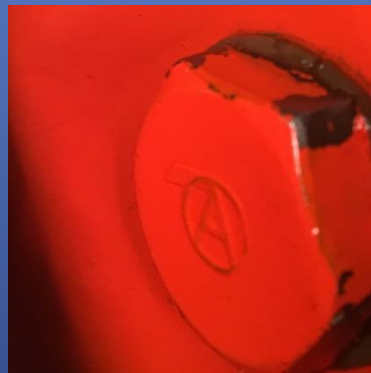
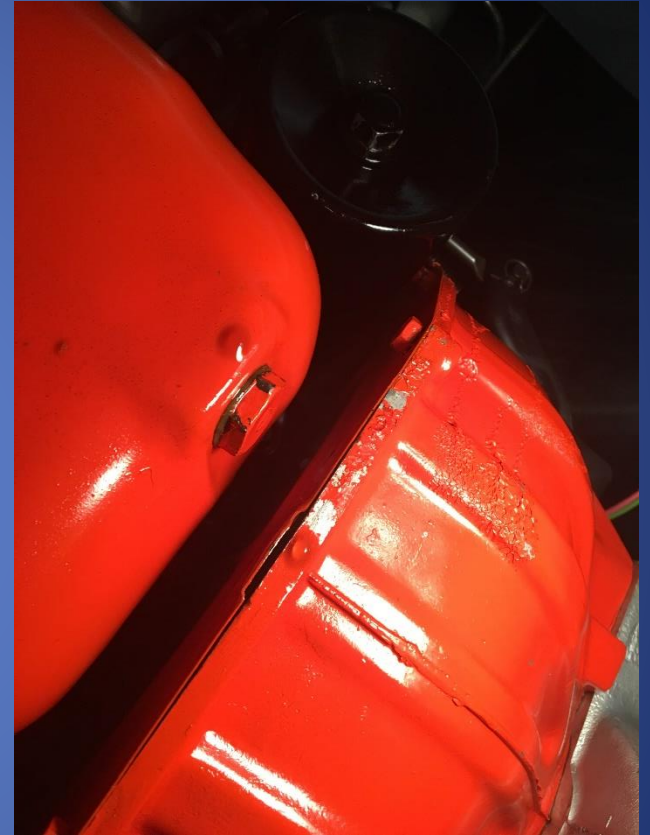


1964-1967

# Small Block Oil Pan



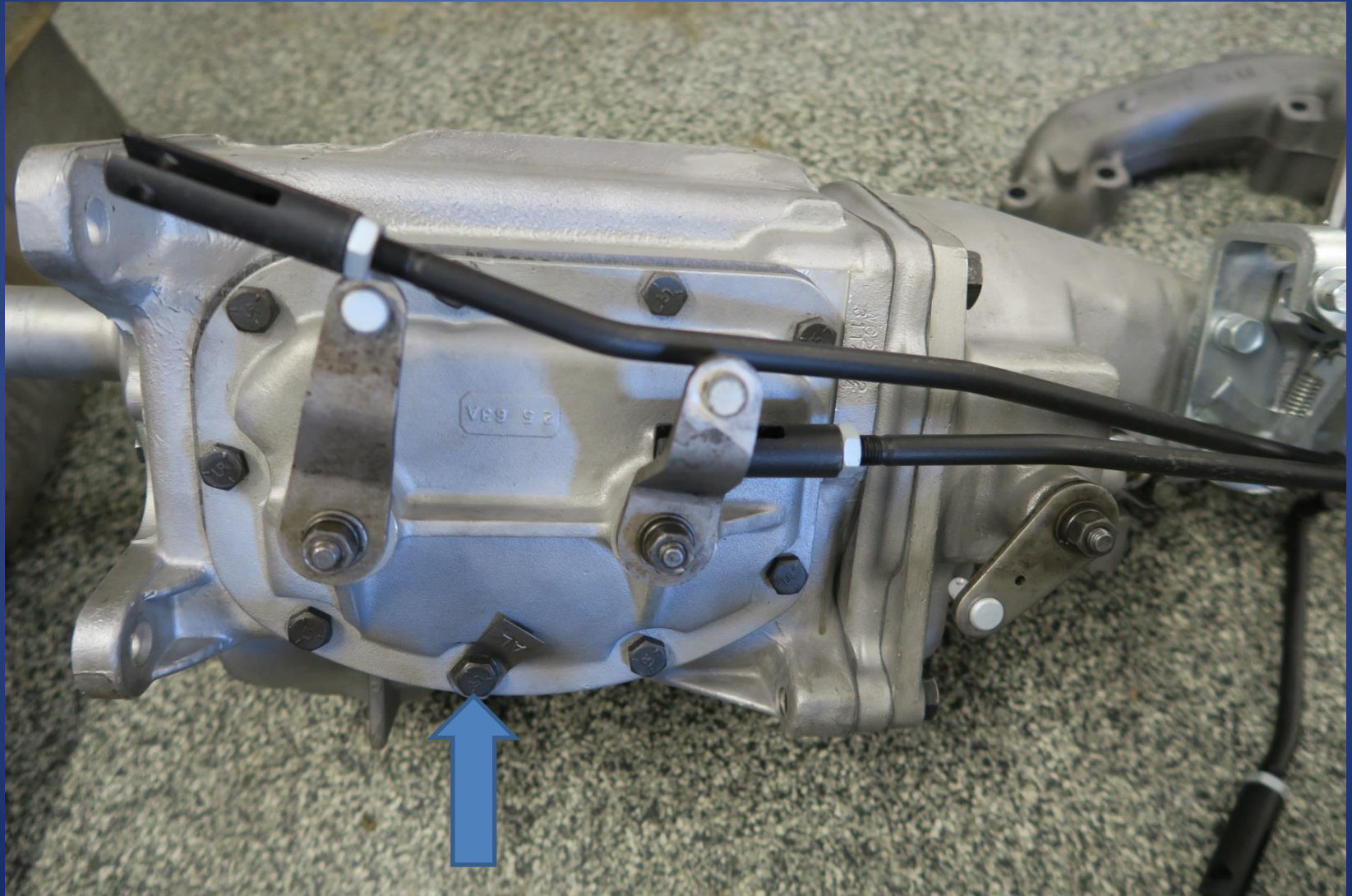
# Big Block Oil Pan



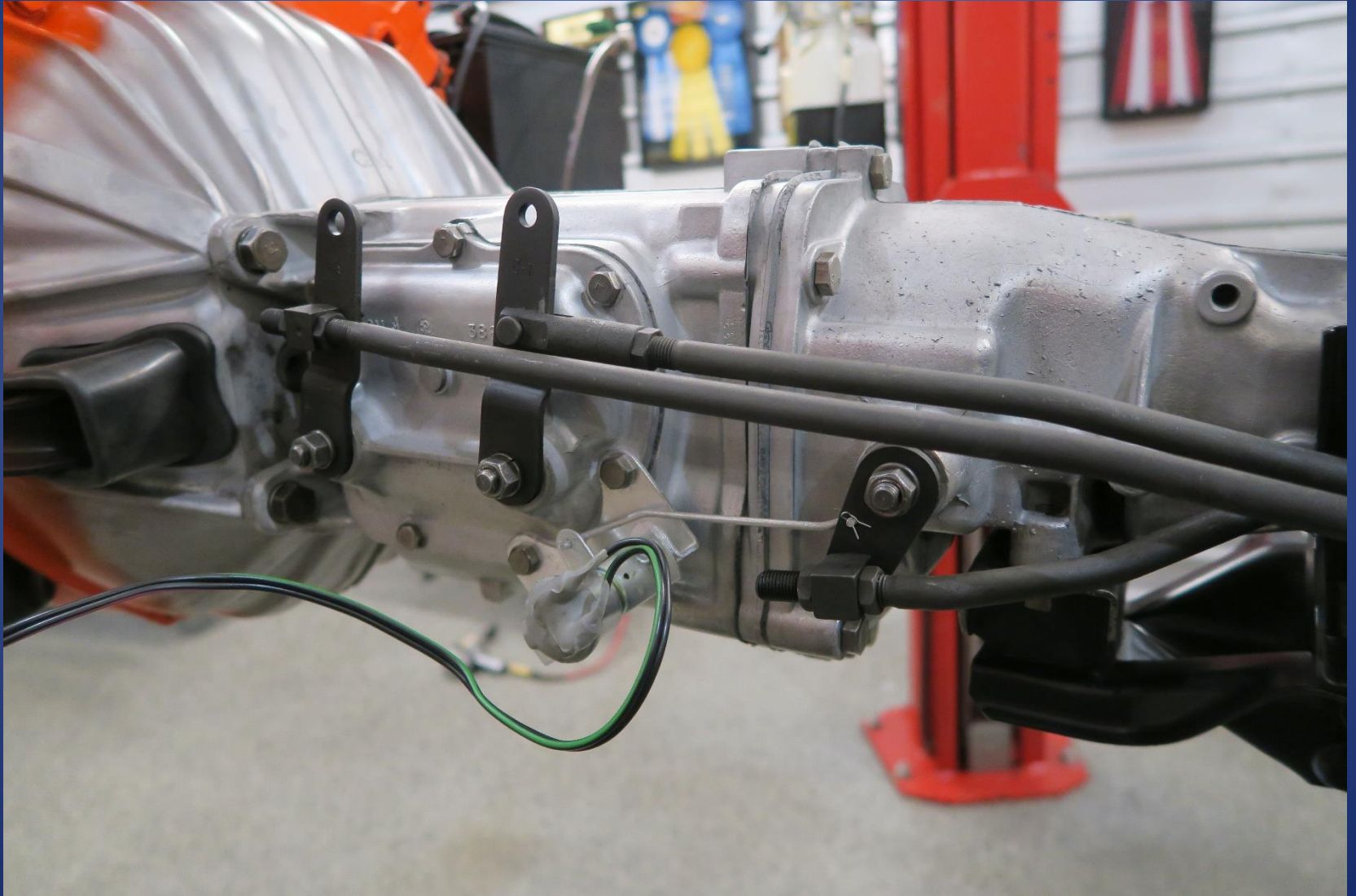
# Oil Canister



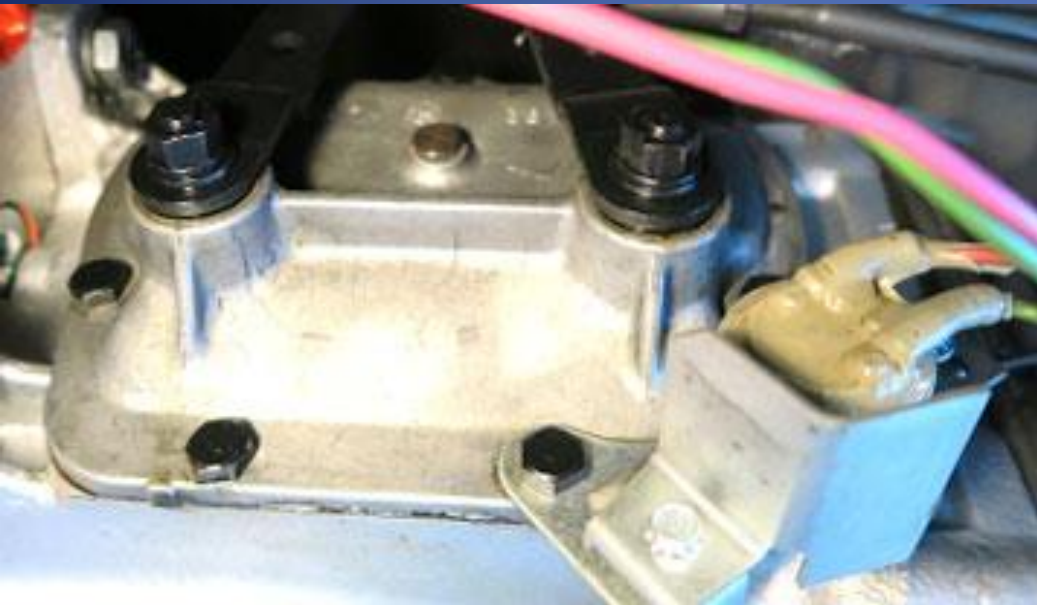
# T10 Borg Warner Transmission 1963 until VIN 15000



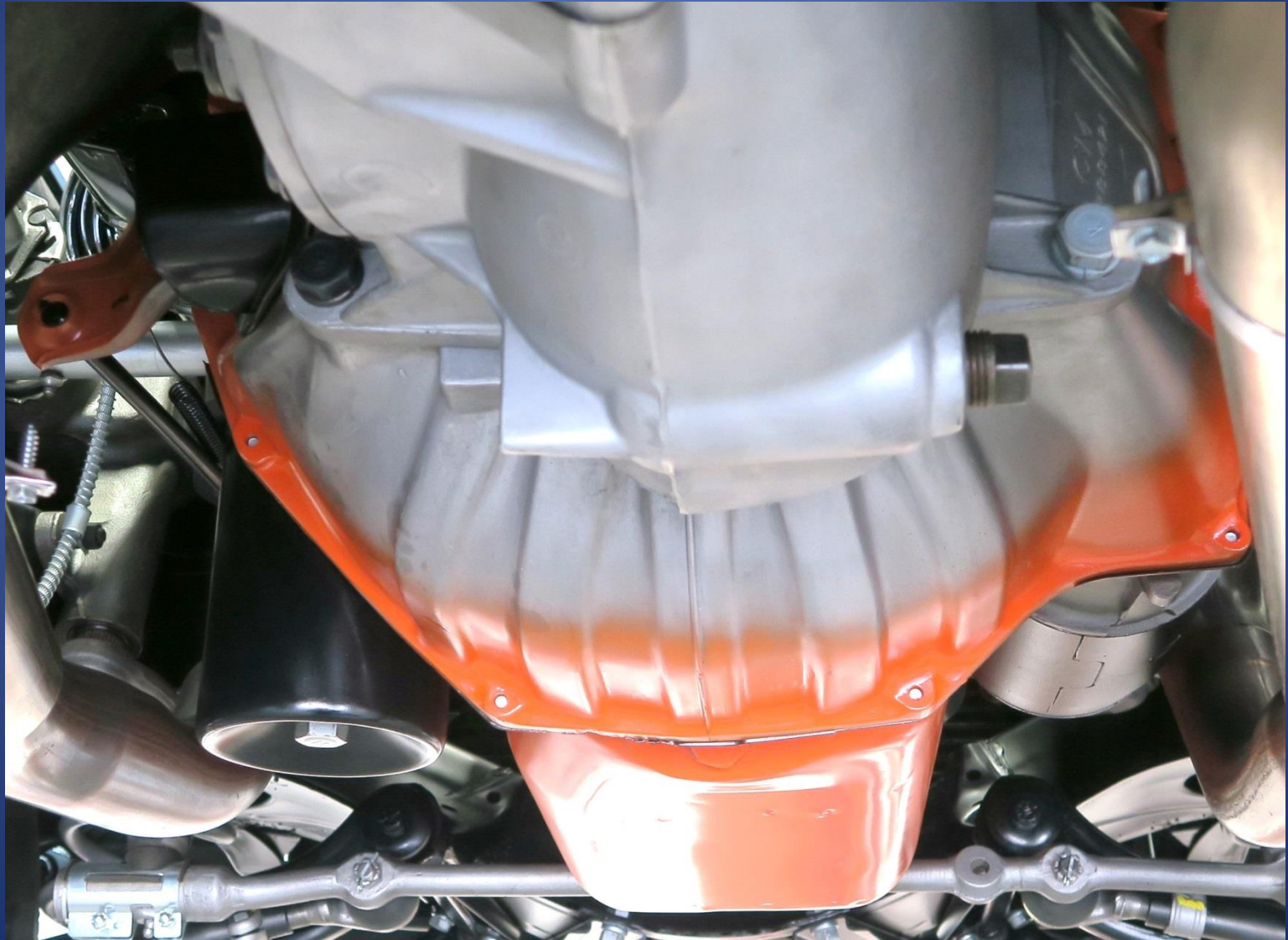
# 1967 Muncie Transmission



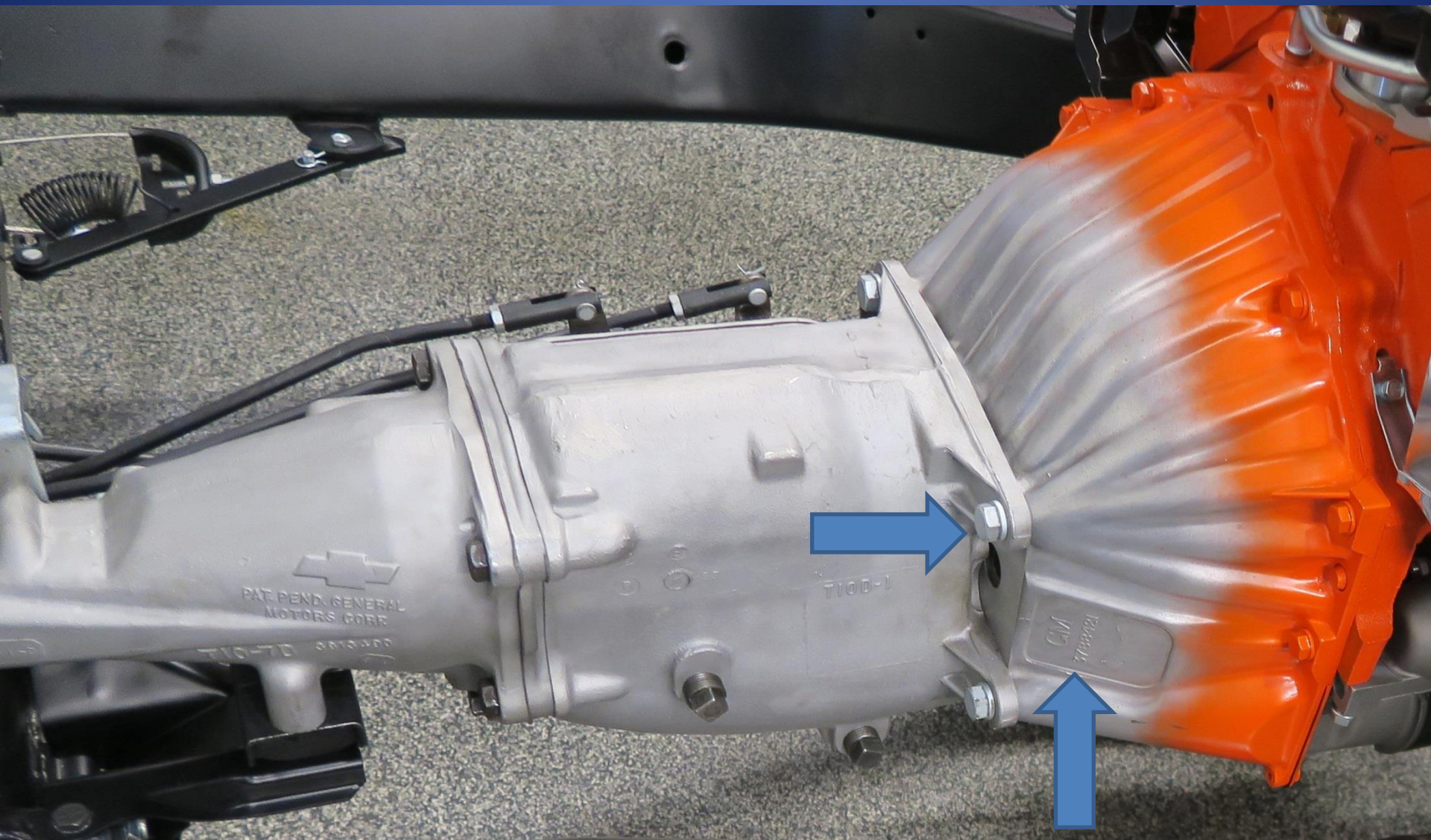
# 1967 Muncie Transmission



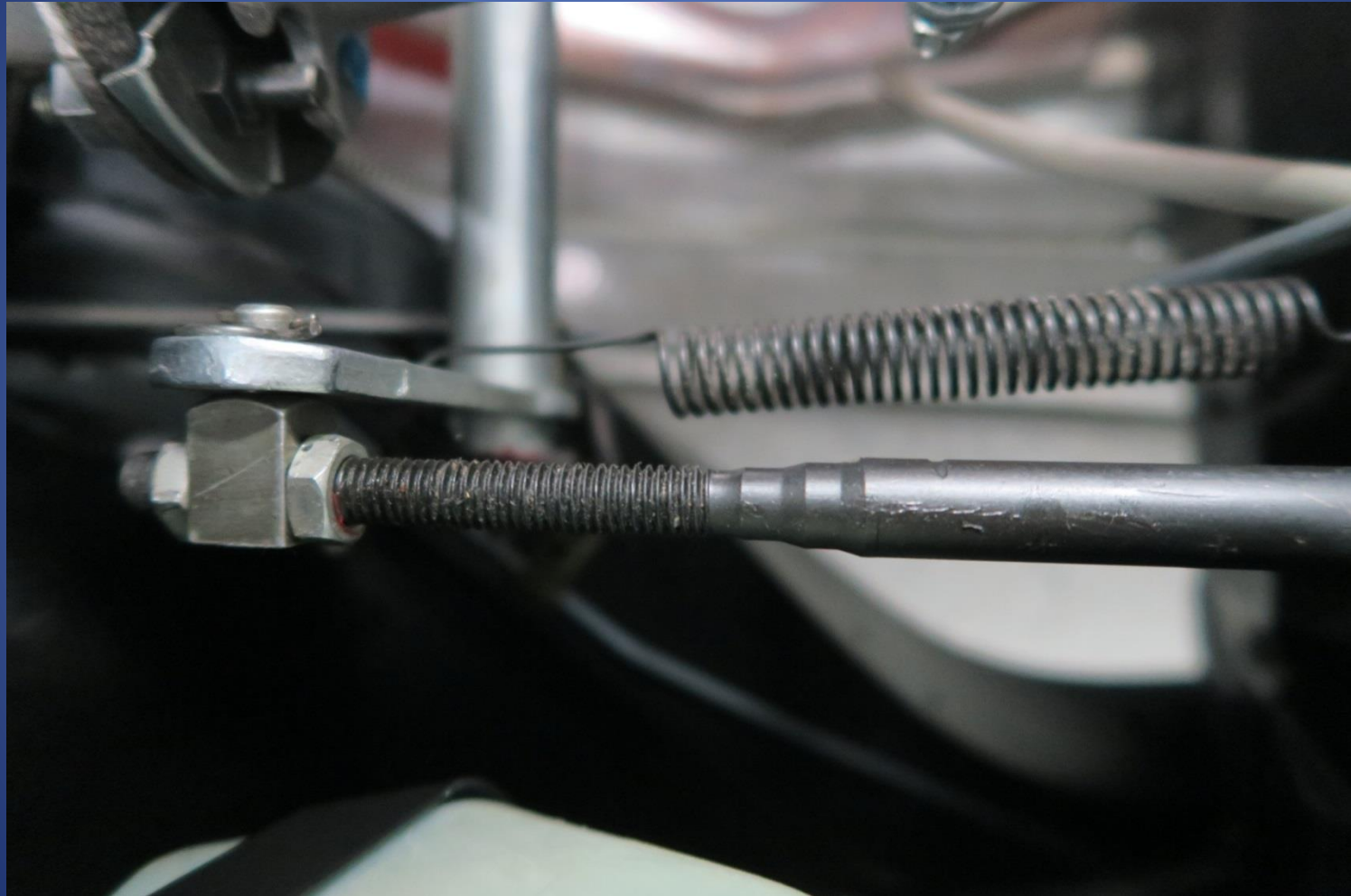
# Bell Housing and Cover



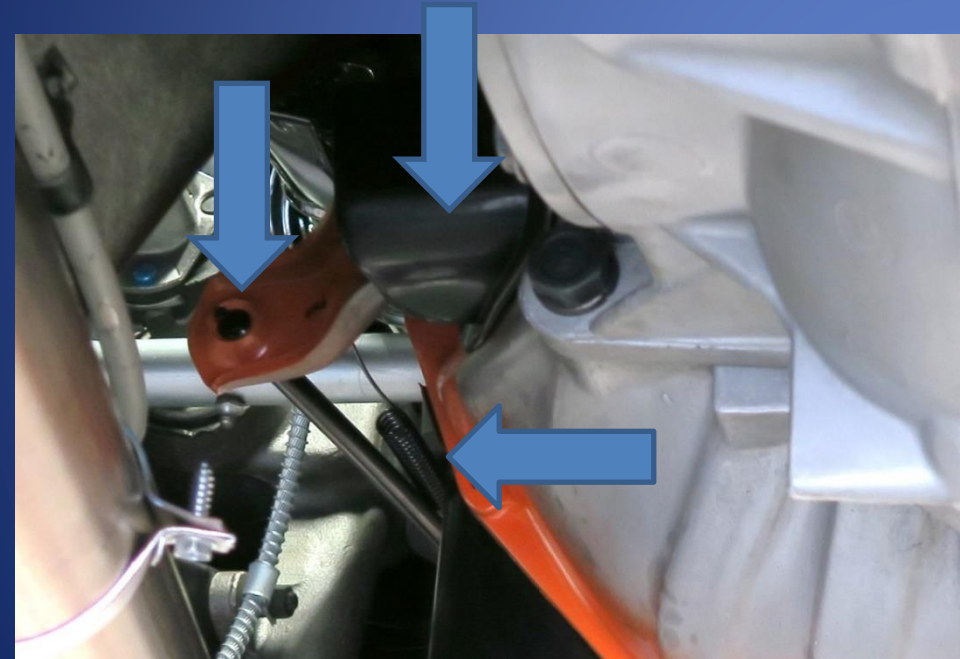
# 1963 T10 and Bell Housing with Overspray



# Clutch Cross Shaft Assembly



# Clutch Assembly



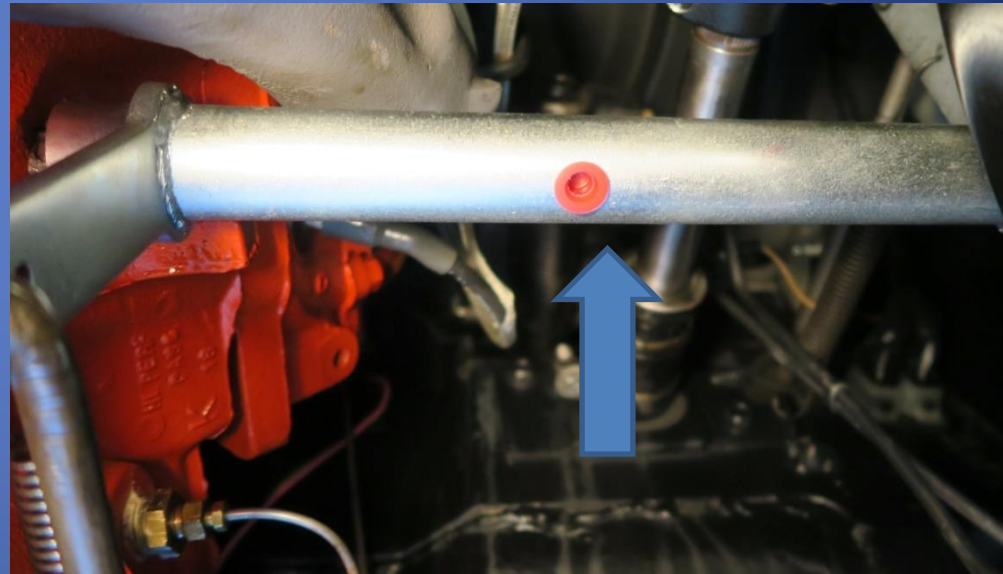
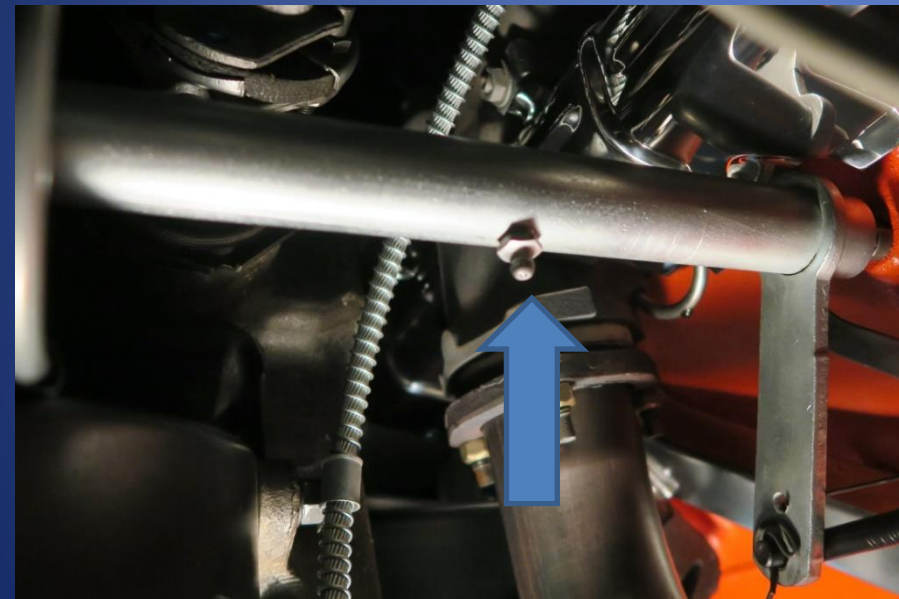
1963



1964-1967

# Clutch Cross Shaft

1963 Zirc grease fitting; 1964-1967 red plastic plug



# Lower Clutch Cross Shaft



1963



1964-1967

# Powerglide Automatic



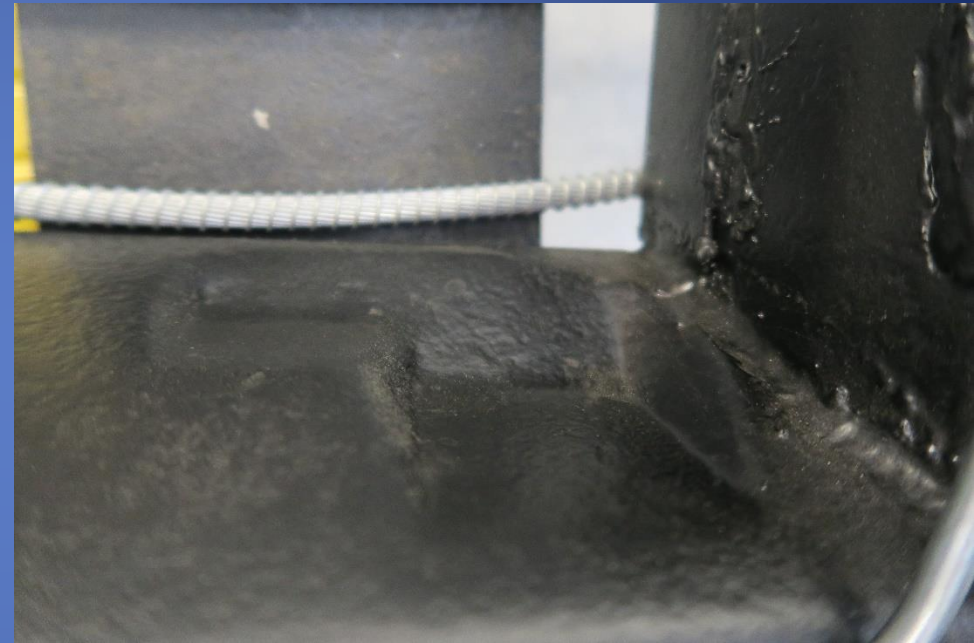
# Finish on Unrestored 63 Frame



# 1963 Frame



Front Cross Member



Frame by Rear Kick-up

# 1967 Frame



# Front Cross-Member

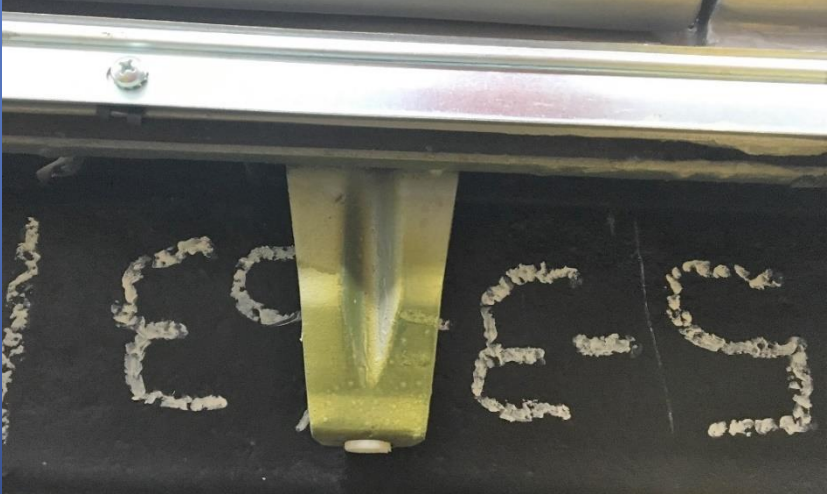
1965-1967



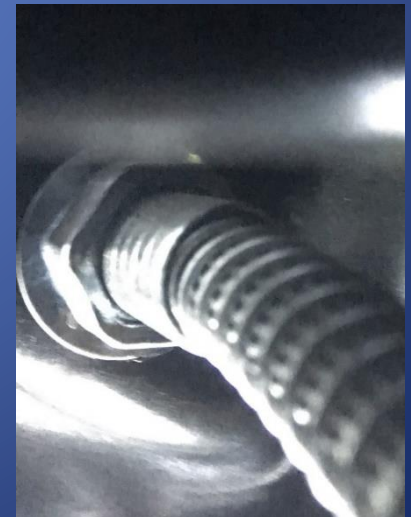
# 1963 Frame Numbers & Shim Marks



**Pull Date 3-63 - 1966**



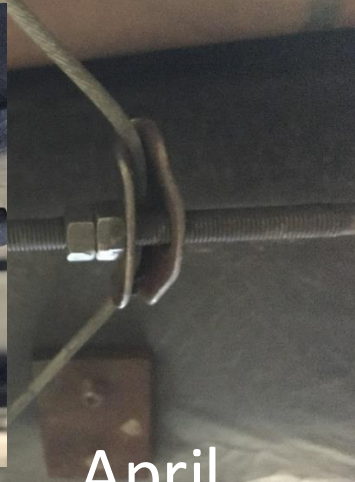
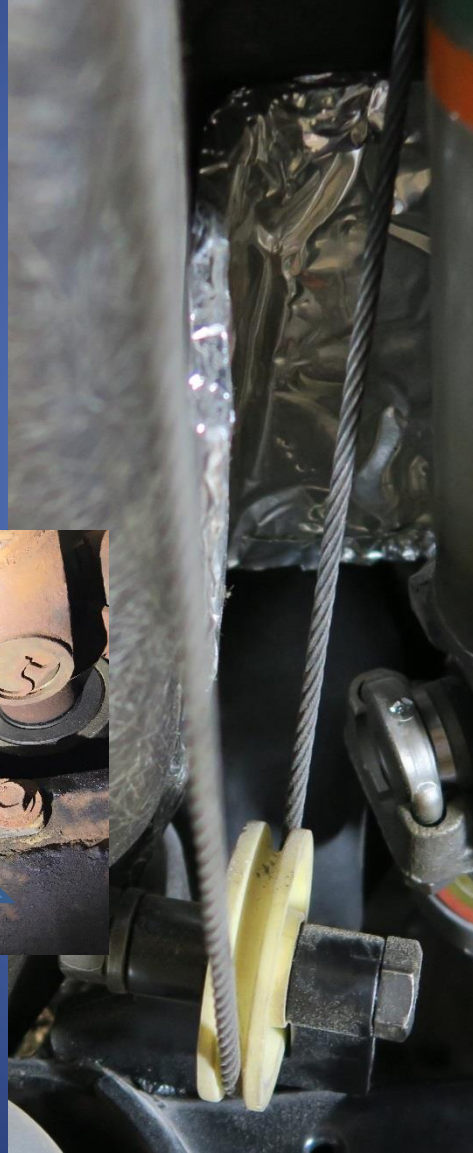
# 1963 Parking Brake



# Parking Brake 1964-1966



# 1967 Parking Brake



April

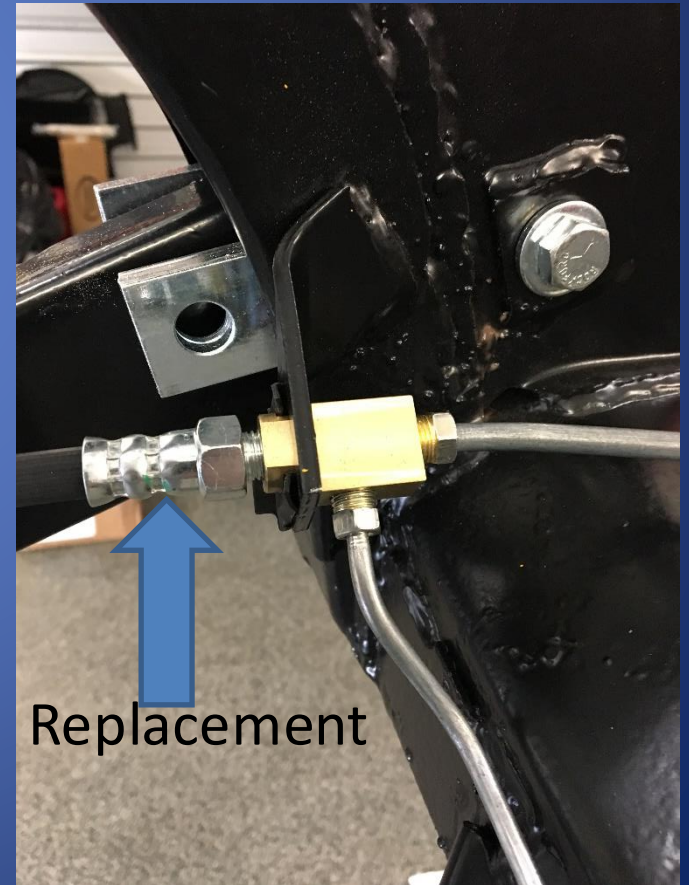


# 1967 Lines

Fuel

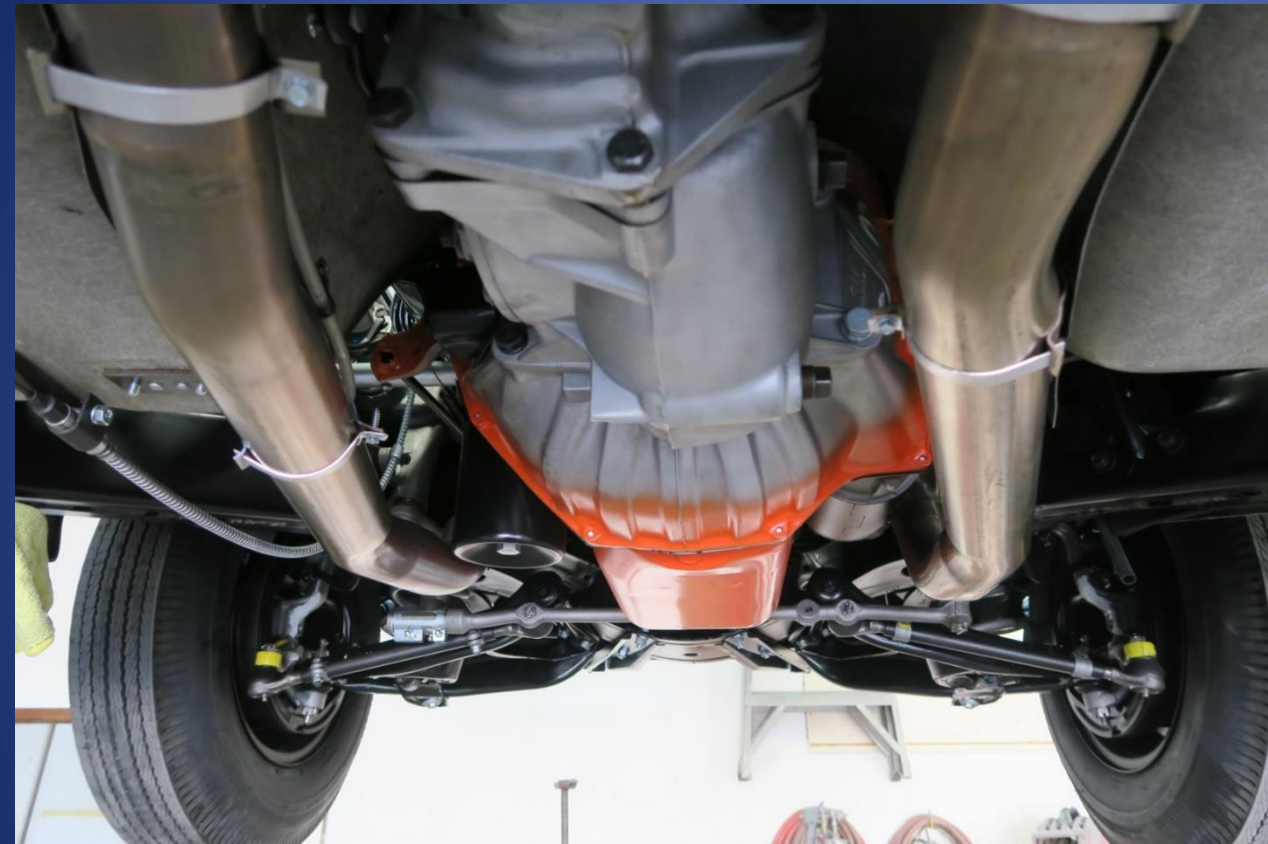


Brake



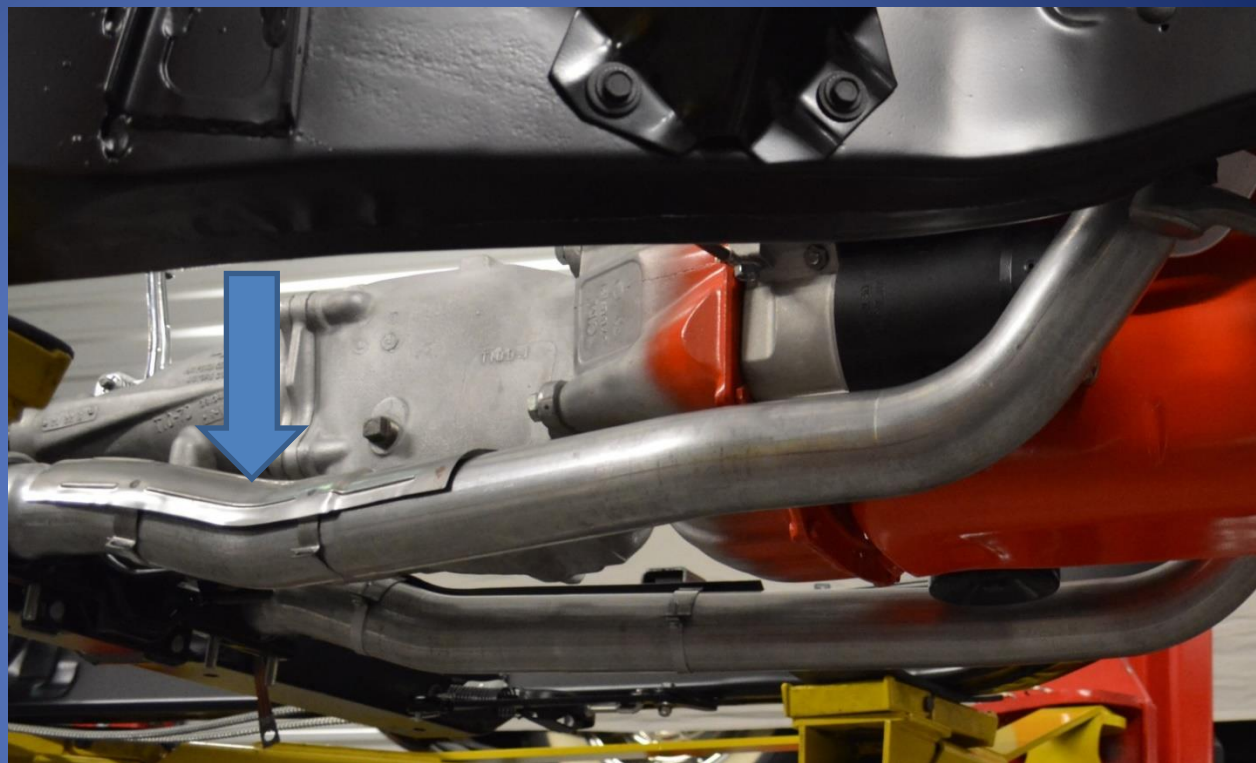
Replacement

# Exhaust Pipe and Mufflers



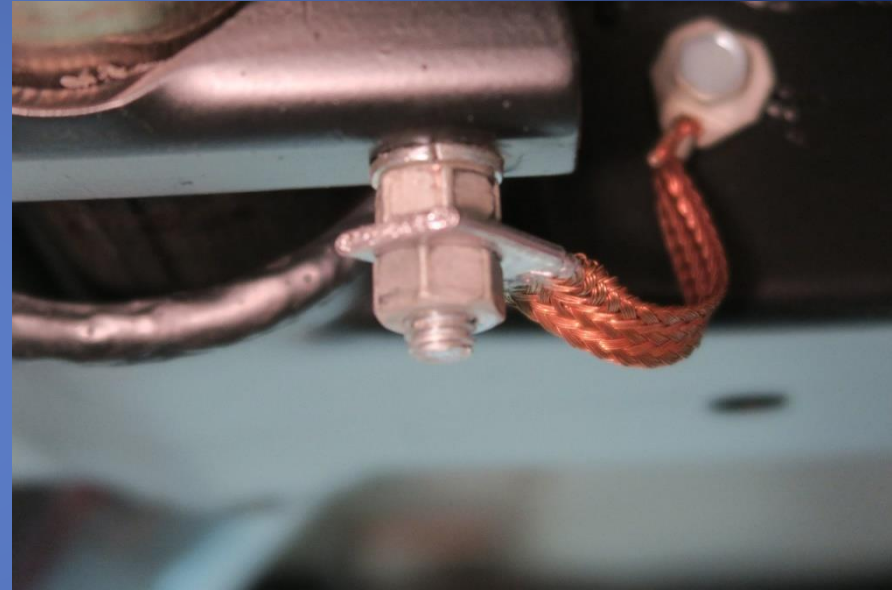
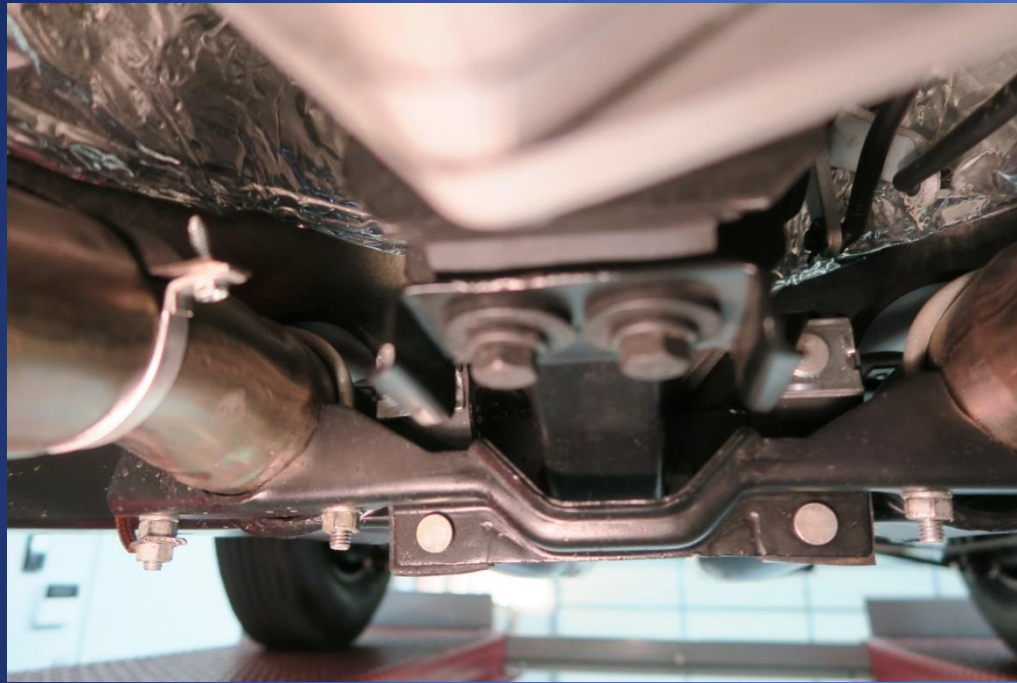
# Exhausts

1963

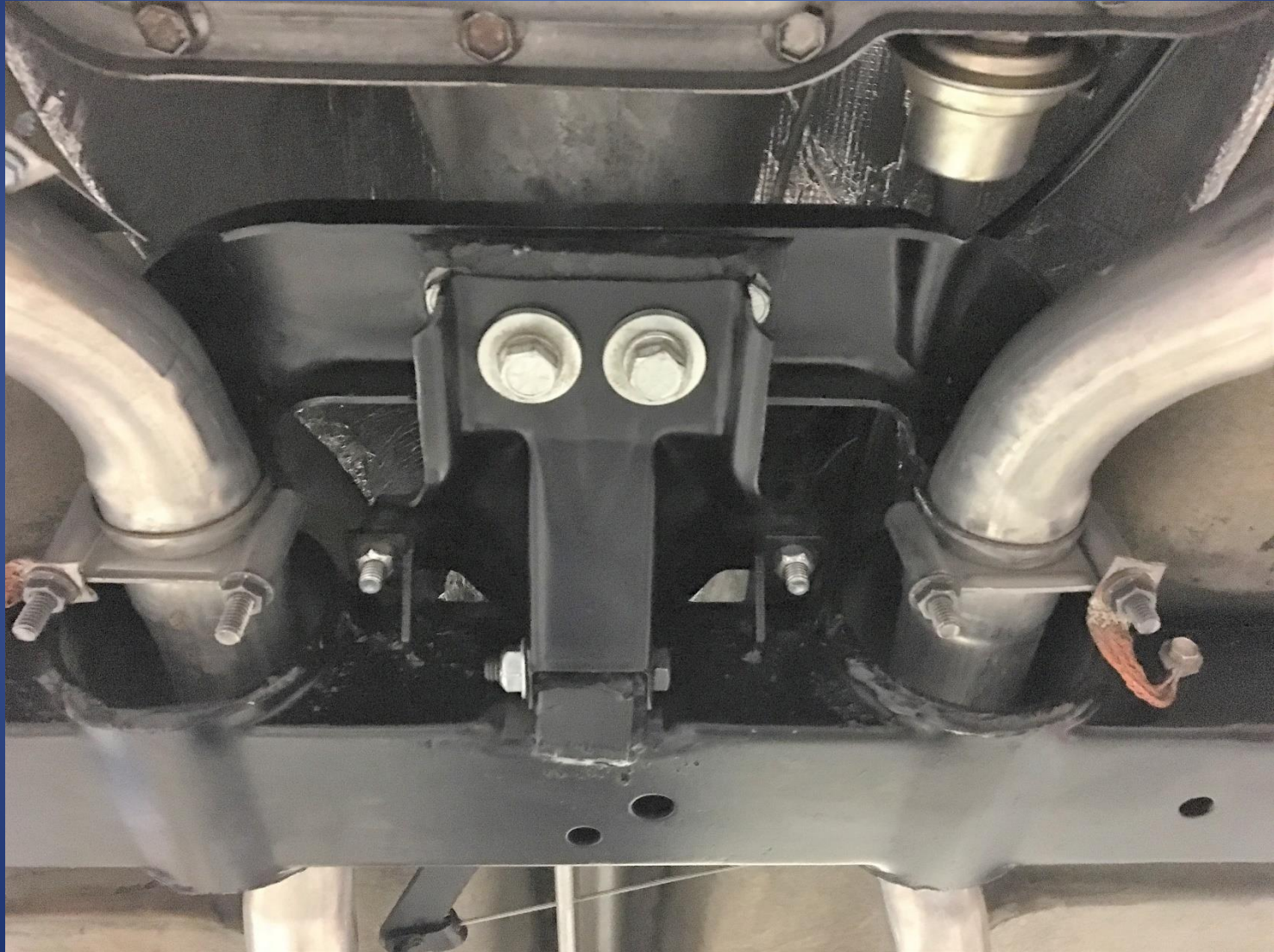


1964-1967

# 1963 Exhaust Hangers, Ground Straps



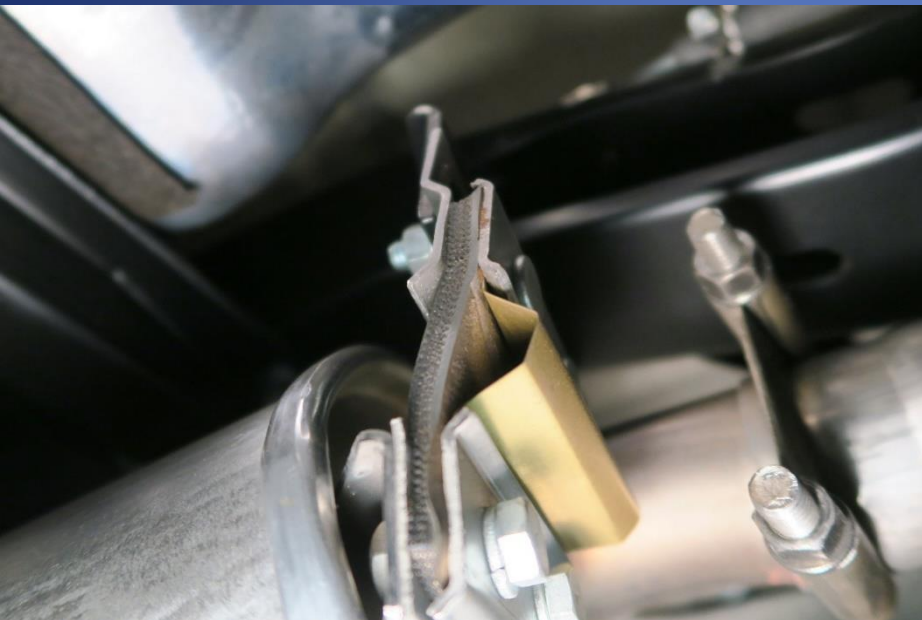
# 1964-1967 Exhaust Hangers



# Exhausts



# Rear Exhaust Hangers



1963

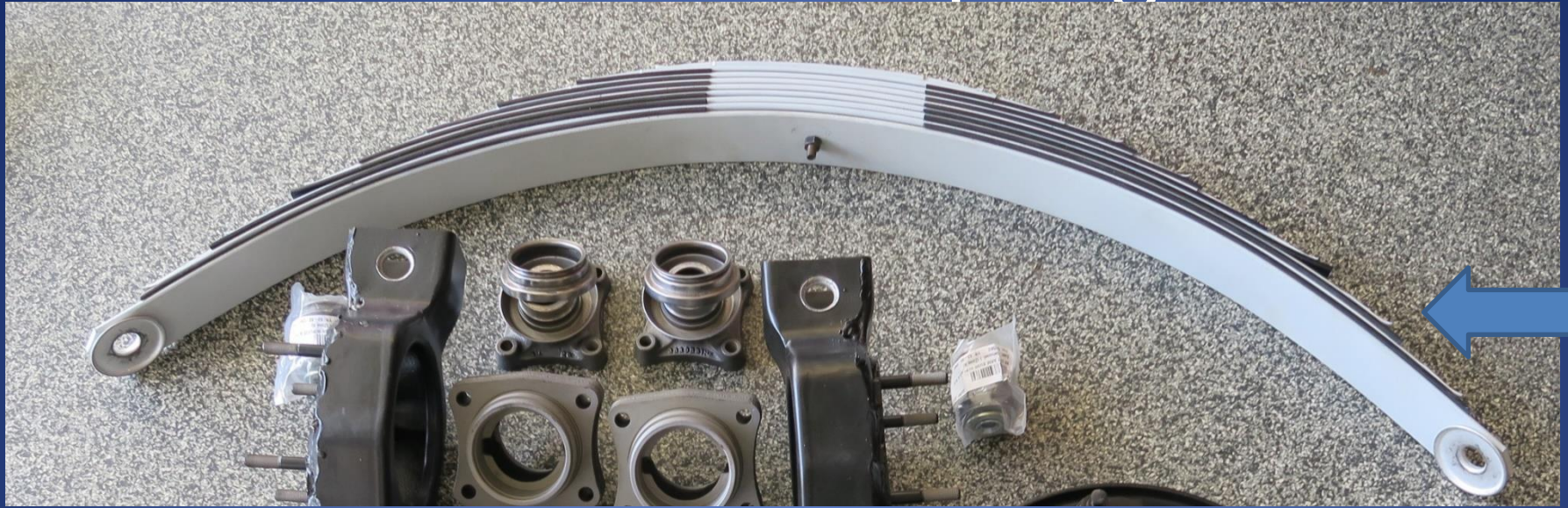


1964-1967

# N14 Side Exhaust



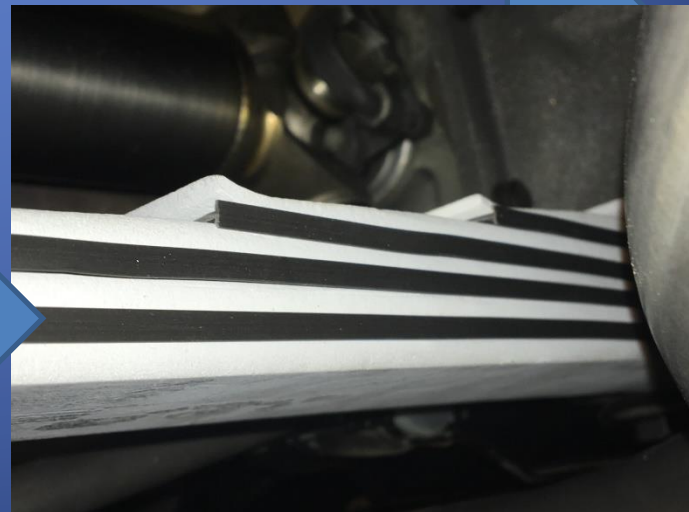
# 1963 Rear Spring



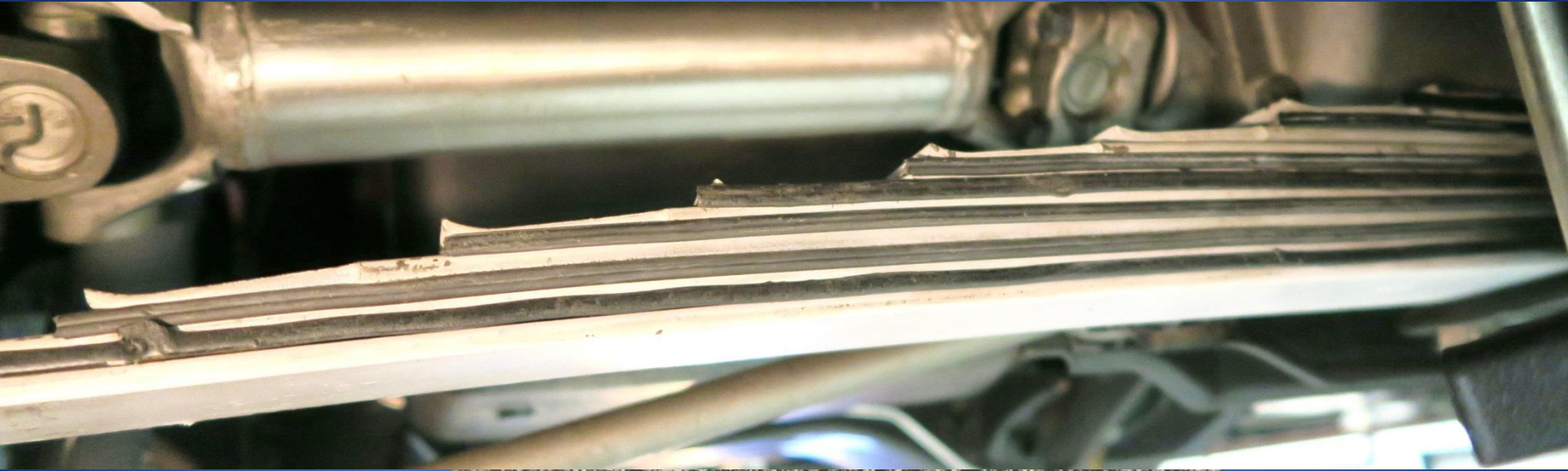
# 1963 Rear Spring



Z06 7 Leaf



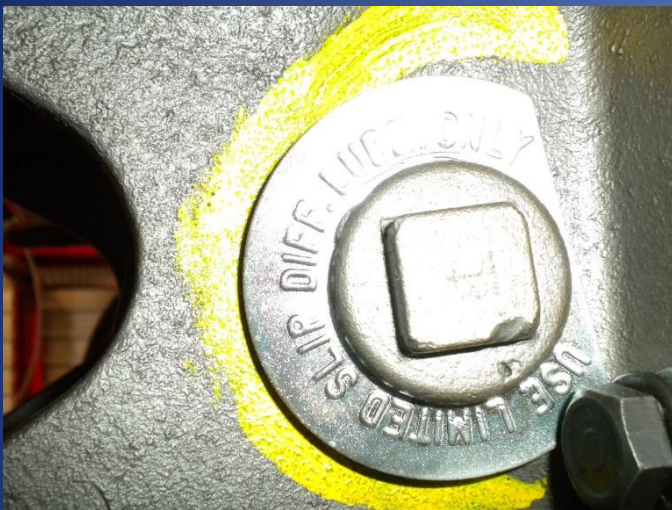
# 1964- 1967 Rear Spring



# Differential



# Differential Positraction



1963-1964

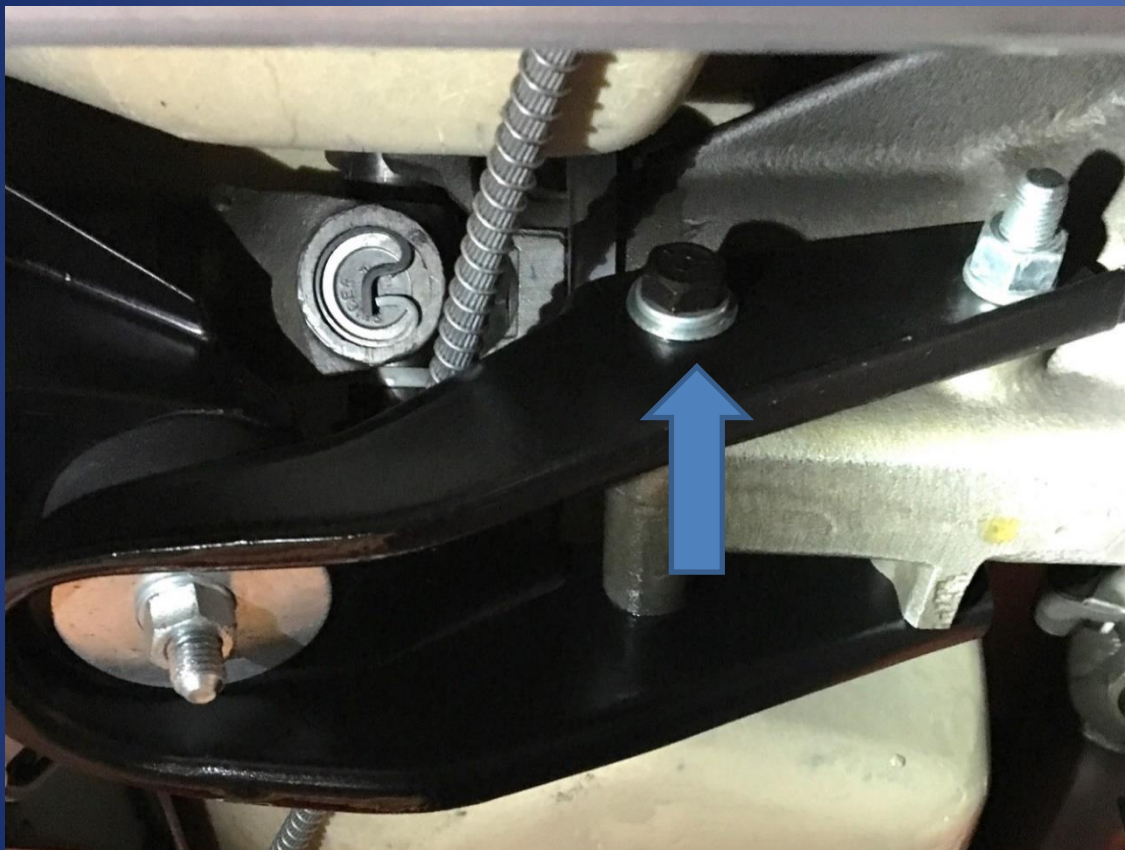


1965

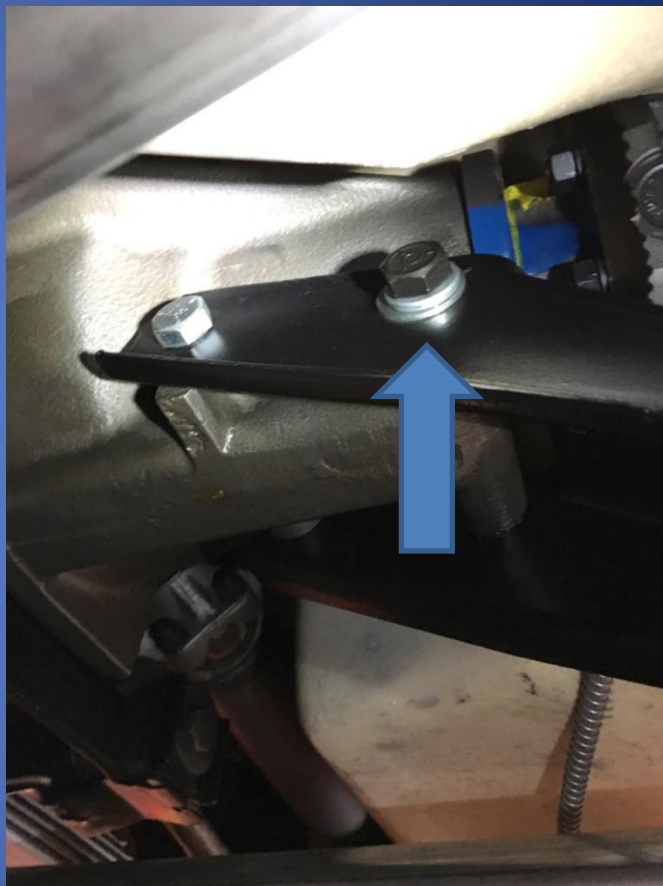


1966-1967

# 1963-1964 Differential Mounting

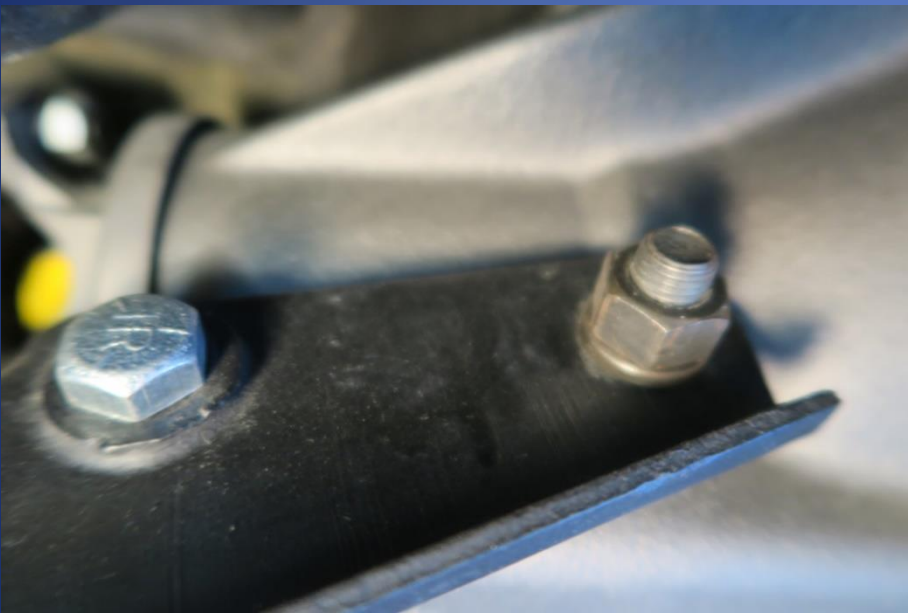


Driver side



Passenger side

# 1965-1967 Differential Mounting



Driver side



Passenger side

# Unrestored Differential



# Half Shafts



# Half Shafts U-Joint Caps

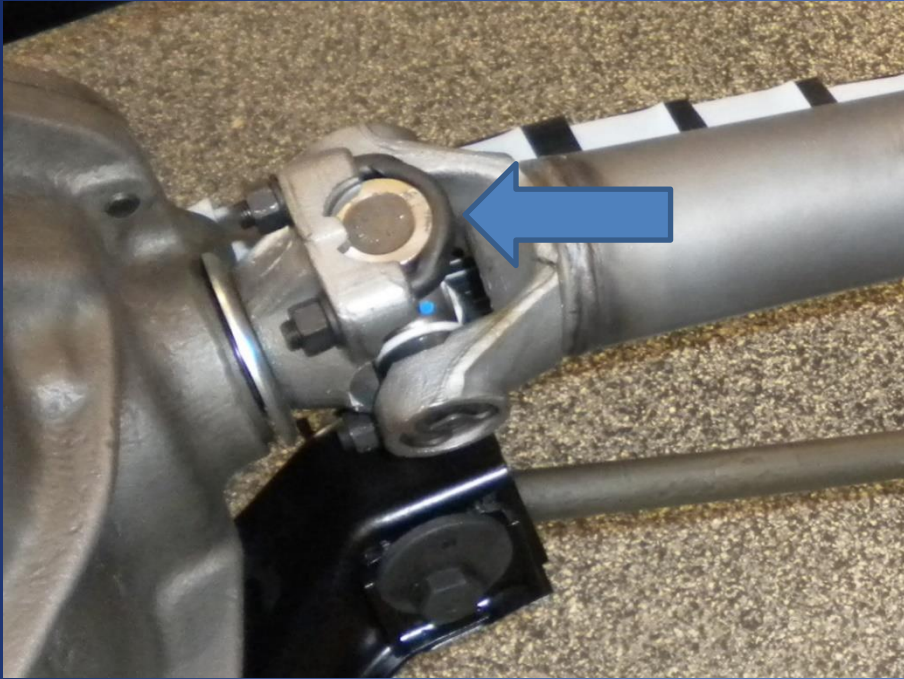


Original



Replacement

# Half Shaft U-Bolts



Small Block



1965 Big Block

# Half Shafts U Joints



1963



1964-1967

# Strut Rods and Stabilizer Bar



# Strut Rods



Heat shield 1963 &  
early 1964 to VIN  
5500

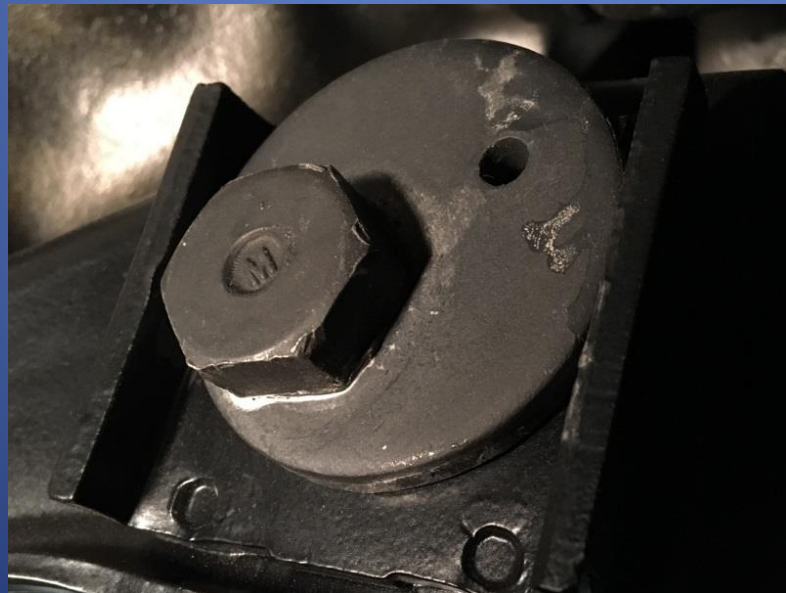


# Camber Adjustment

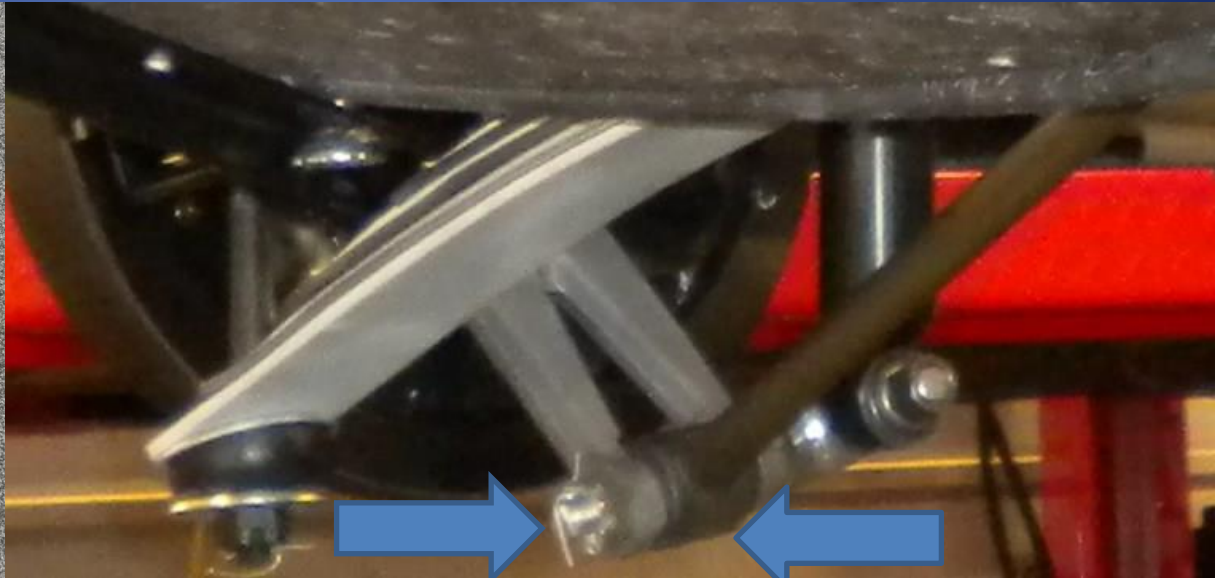
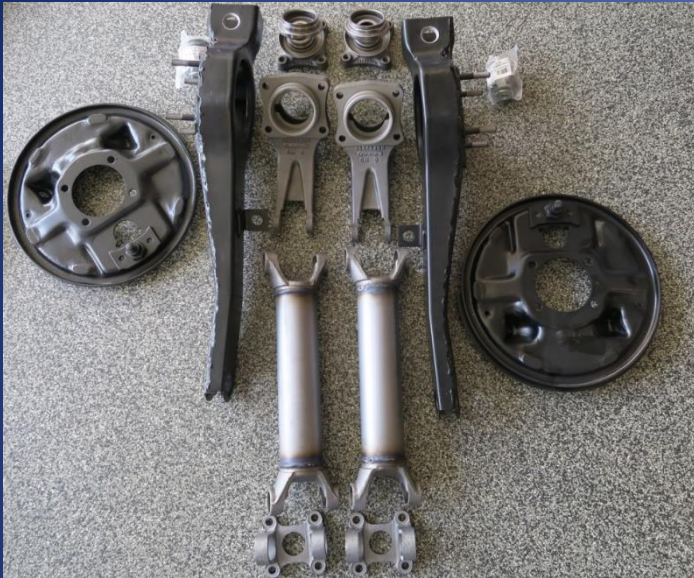


1963

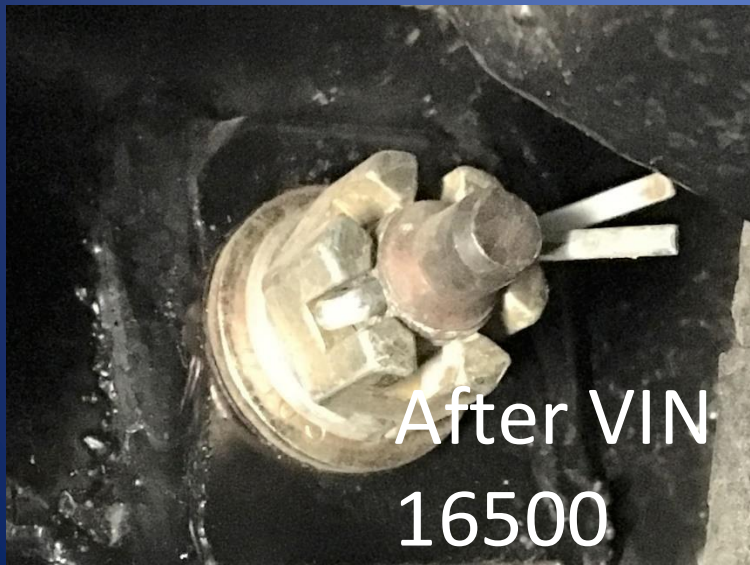
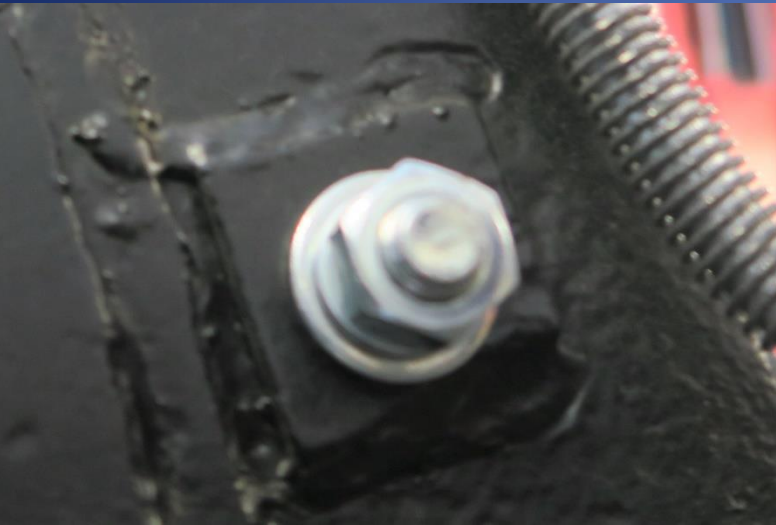
1964-1967



# Trailing Arms and Spindles



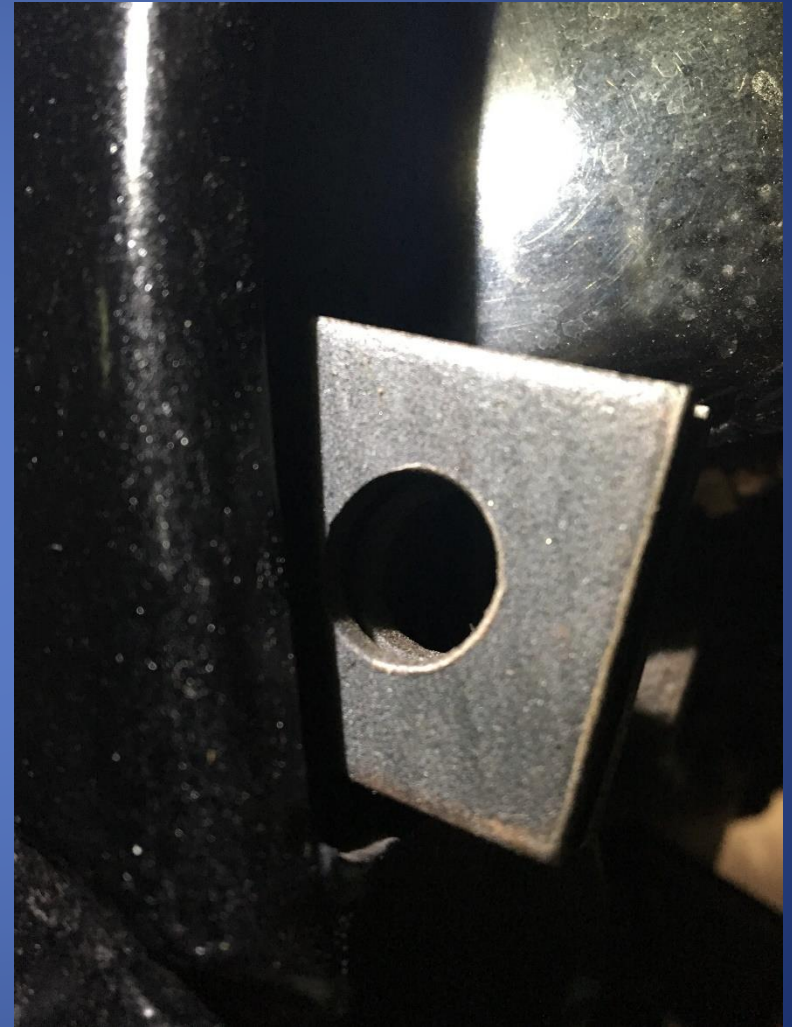
# Trailing Arm and Brake



# Trailing Arm Shims

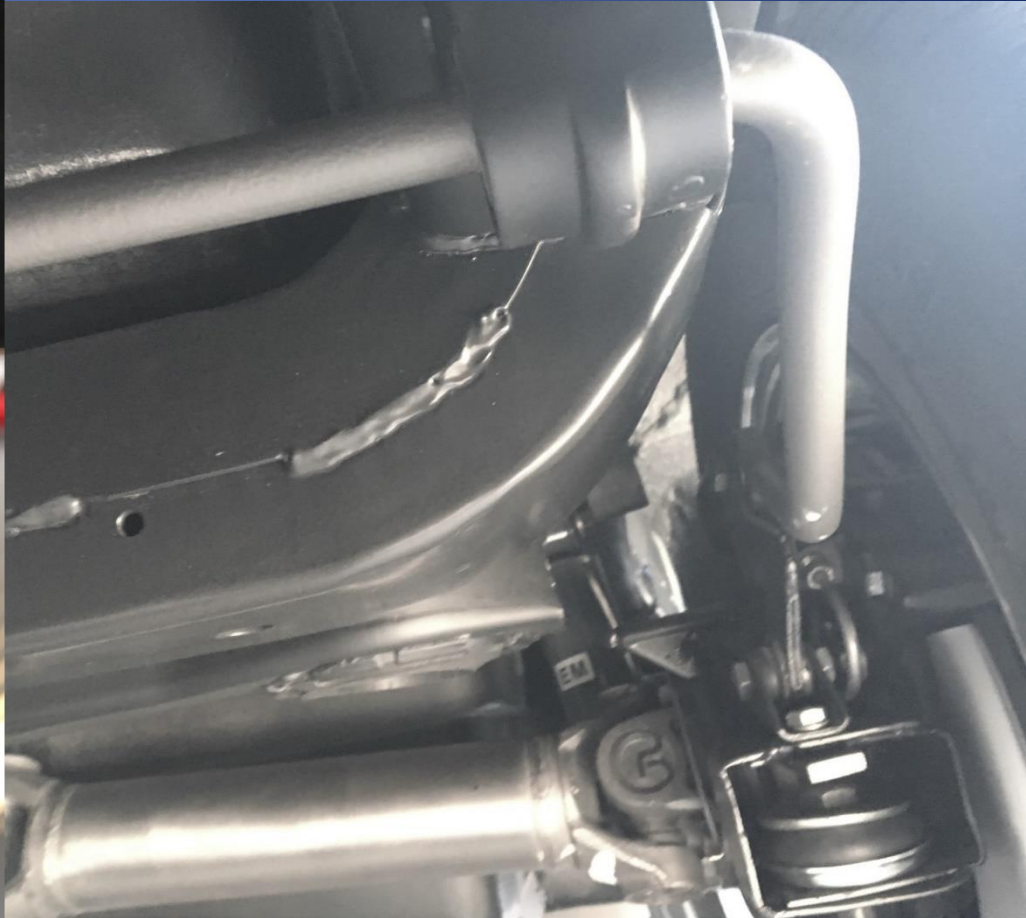


1963 to VIN 15000



After VIN 15000 & 1964-1967

# Rear Stabilizer Big Block



# Early 1963 Spindles



# Late 63 -67 Spindle

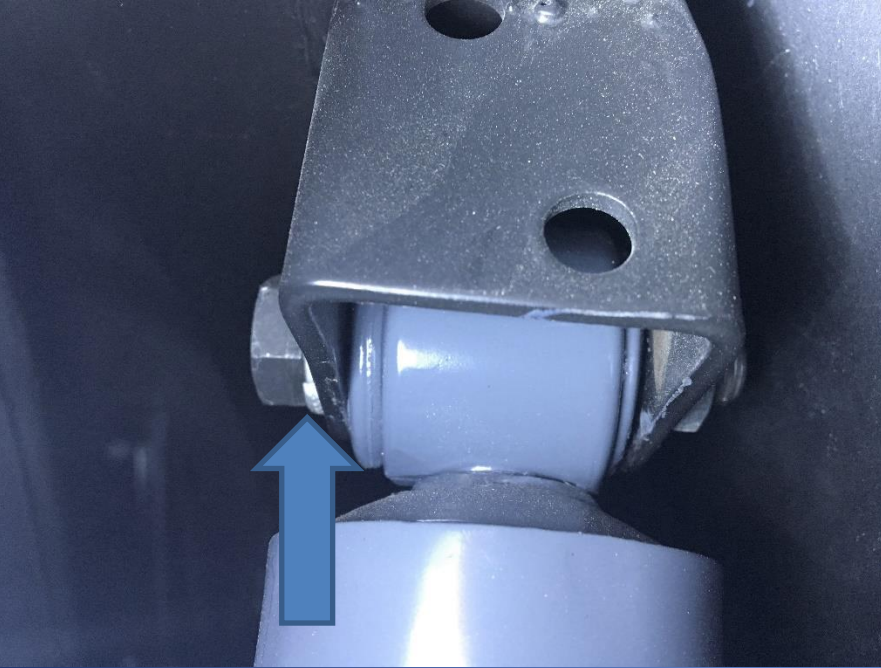


French locks late

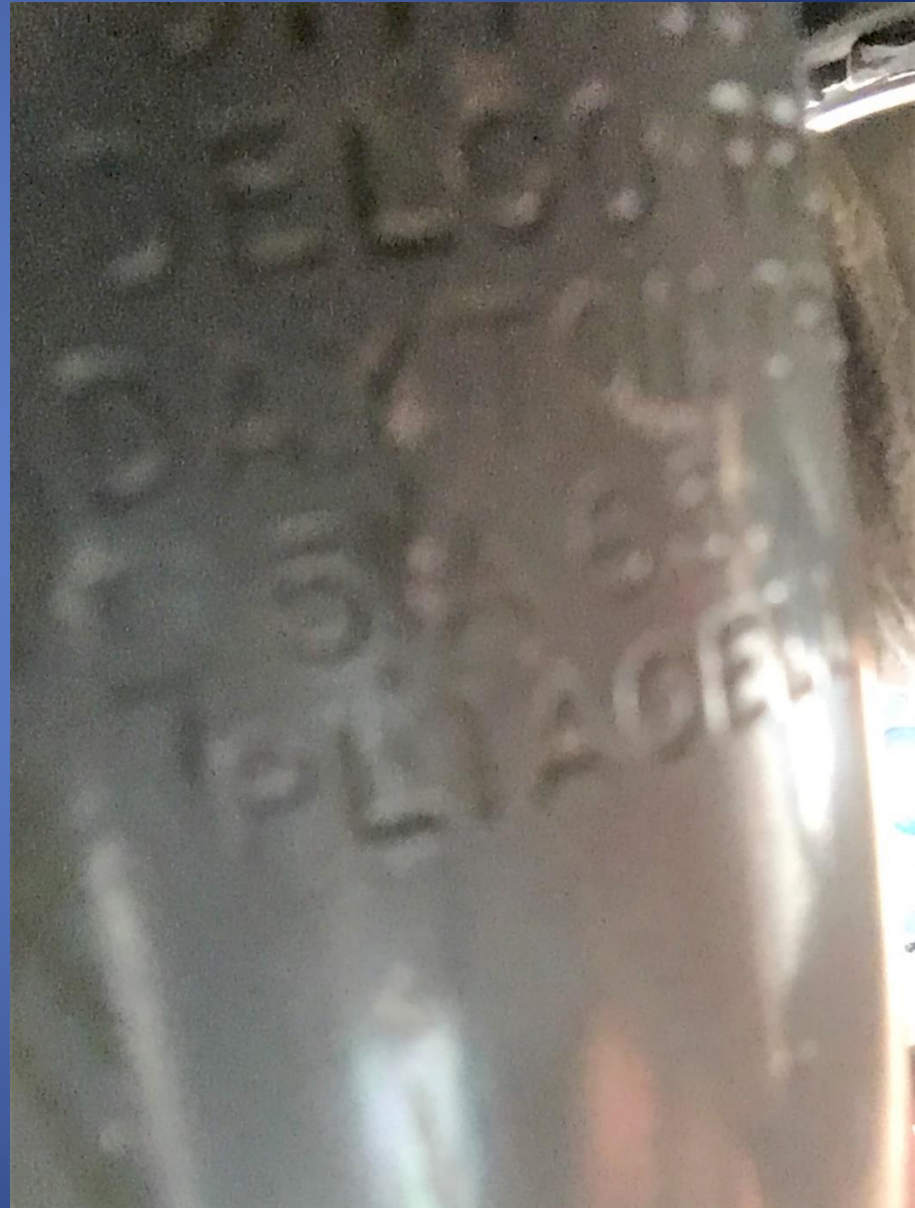
# 1963 Shocks



After VIN 9000 in 1964  
-1967 Shocks



# F40 Shocks



# F40 Shocks



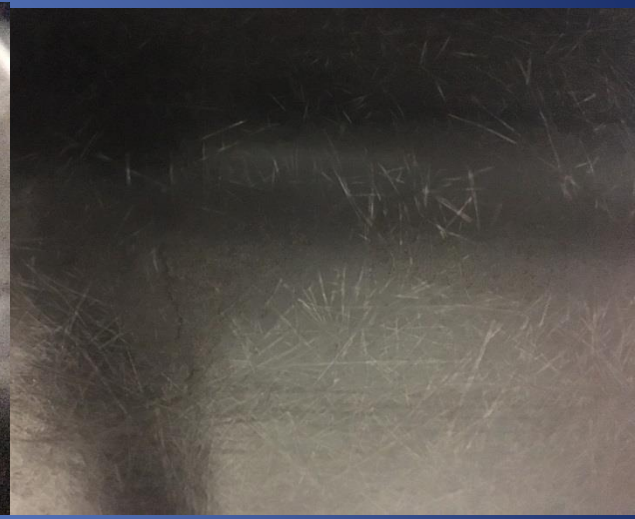
# Underbody Fiberglass



1963 White to VIN 11000



63-66 Gray



1967 Dark Gray

St.  
Louis



AO  
Smith



# Fuel Tank



# Unrestored Fuel Tank

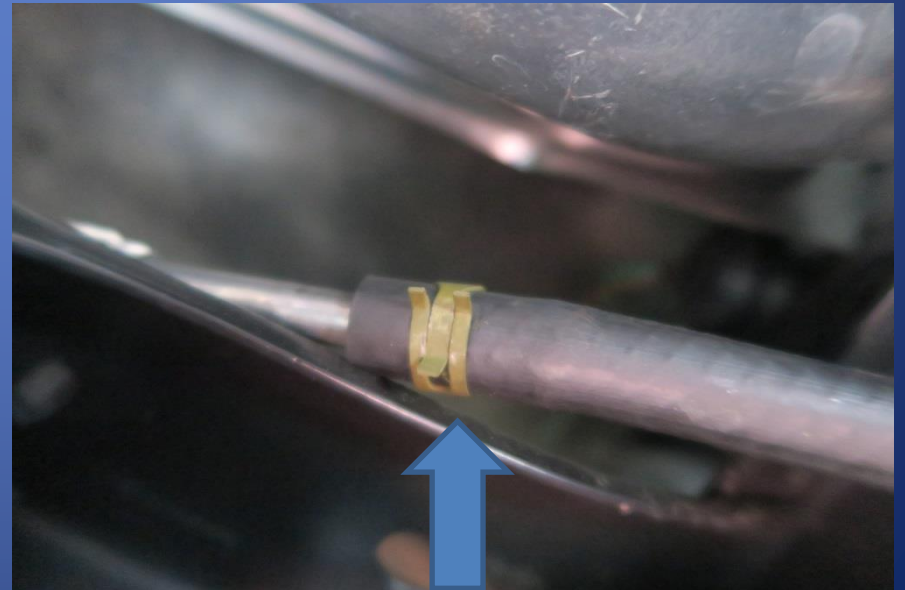


# Sending Unit



1963

1964-  
1967



# CDCIF

- Configuration
- Date
- Complete
- Installation
- Finish

THANK YOU