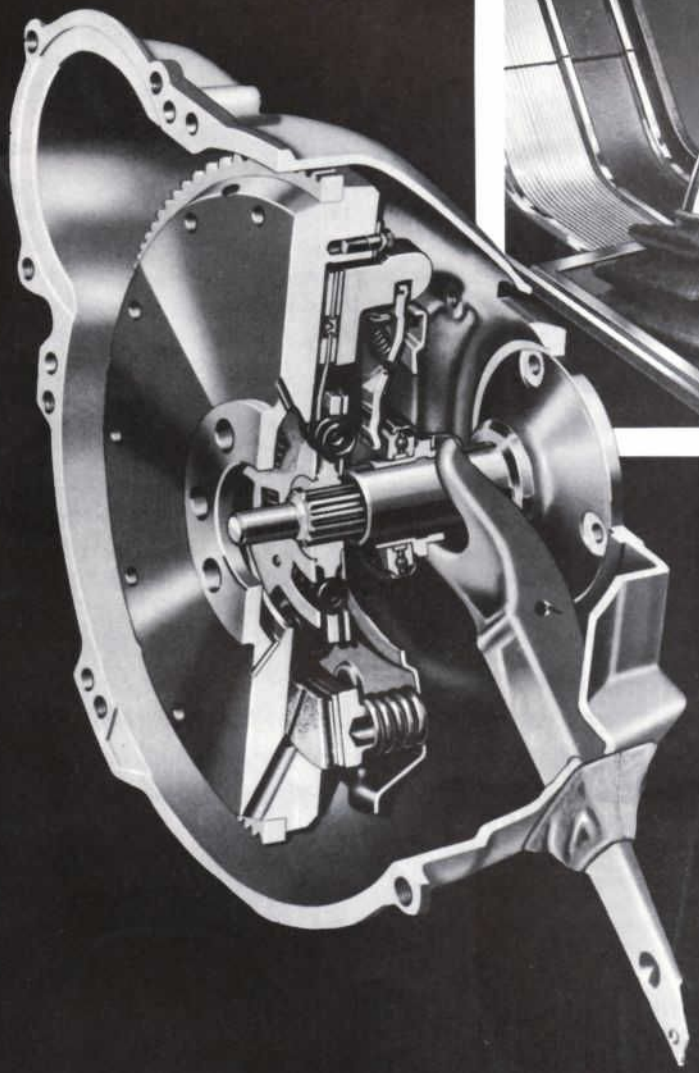
JULY-AUGUST, 1966

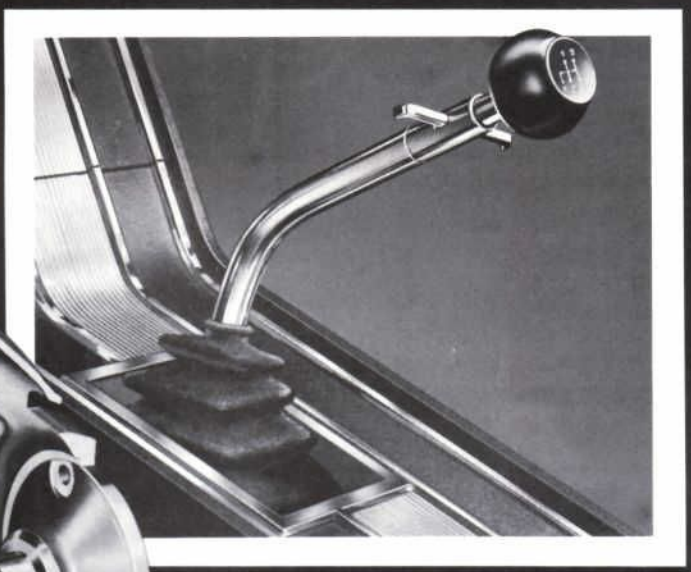
Shop Tips

FROM Ford

VOL. 4, NO. 7

Technical parts and service information published by Ford Division to assist servicemen in Service Stations, Independent Garages and Fleets.





featuring...
CLUTCH SERVICE

See Index Page 2

Be sure to file this and future bulletins for ready reference. If you have any suggestions for additional information that you would like to see included in this publication please write to: Ford Division of Ford Motor Company, Parts and Service Promotion and Training Dept., P. O. Box 598, Dearborn, Michigan 48121.

FoMoCo GENUINE PARTS AUTOLITE ROTUNDA

From Your Ford Dealer

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CLUTCH SERVICE

All Ford cars use a centrifugal, single dry disc type clutch. The principal components are the clutch disc, pressure plate and release bearing. The clutch is operated by linkage which must be properly adjusted and free of any conditions which might cause binding or excessive force to apply. The transmission, pressure plate, housing, clutch disc, flywheel and crankshaft must be properly aligned to prevent slippage, vibrations and noise. Ordinarily, the clutch does not require periodic service unless one of the trouble symptoms in the Diagnosis Guide is encountered.

IN THIS ISSUE

CLEANING AND INSPECTION

RELEASE BEARING

Wipe all oil and dirt off the release bearing. THE BEARING IS PRE-LUBRICATED AND SHOULD NOT BE CLEANED WITH SOLVENT.

Inspect the bearing retainer for loose spring clips and rivets.

Inspect the release bearing assembly for burrs which may cause the assembly to drag on the transmission bearing retainer. Any such burrs should be cleaned up with fine crocus cloth. If burrs are found, inspect the transmission input shaft bearing retainer for evidence of scoring. Scoring should be polished out with crocus cloth. Coat the bearing retainer with a thin film of lithium-base grease (Ford Part Number C1AZ-19590-B). Prior to release bearing installation, apply a light film of Lubriplate on both sides of the release lever fork where it contacts the release bearing hub and retaining springs, and to the release bearing surface that contacts the pressure plate fingers. Care must be taken to avoid contaminating the clutch disc with any lubricants as this will cause slippage, and chattering.

Check the release bearing for roughness or noise by holding the bearing inner race and rotating the outer race while applying pressure. If rough or noisy, replace the bearing.

Most release bearing failures are caused by improper clutch pedal adjustments. If the clutch linkage does not have enough free travel, the release bearing will constantly touch the release fingers and will spin whenever the engine is running.

Release bearing failures may also be caused by a bent release lever. Check for excessive wear on one side of the release bearing assmbly where the release lever contacts it.

Misalignment between the engine and transmission can also cause release bearing failure.

PRESSURE PLATE AND COVER

Inspect the surface of the pressure plate for burn marks, scoring or ridges. Generally, pressure plate resurfacing is not recommended. However, minor burn marks, scores or ridges may be removed if the flatness of the pressure plate is maintained. If the pressure plate is badly heat-checked or deeply scored, replace the pressure plate and cover assembly. Clean the pressure plate surfaces with a suitable solvent such as carbon tetrachloride, to be sure they are free of oil film. DO NOT USE CLEANERS WITH PETROLEUM BASE AND DO NOT IMMERSE THE PRESSURE PLATE IN THE SOLVENT.

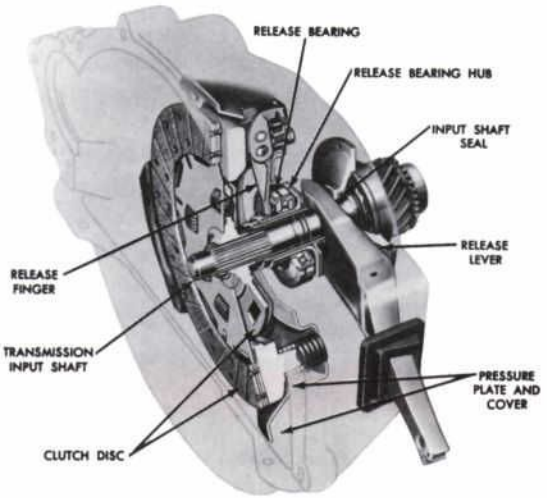


Figure 1—Clutch Assembly

Lay the plate on the floor, being careful not to score or scratch the surface, and force each individual finger down, then release quickly. If the finger does not return quickly, a binding condition is indicated and the pressure plate should be replaced.

Lubricate the pressure plate with lithium-base grease between the driving lugs and the edges of the pressure plate openings as shown in Figure 2. Depress the pressure plate fingers fully, apply the lubricant, and then move the fingers up and down until the lubricant is worked in. DO NOT APPLY EXCESSIVE AMOUNTS OF LUBRICANT.

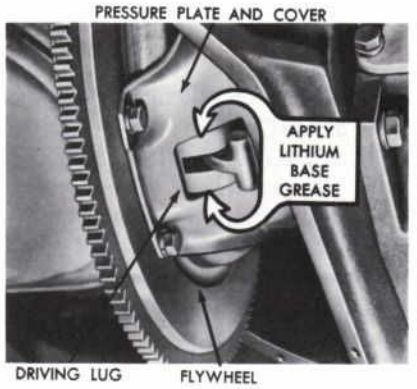


Figure 2—Pressure Plate Lubrication Points

DIAGNOSIS GUIDE—CLUTCH

TROUBLE SYMPTOMS	POSSIBLE CAUSES	CORRECTION
LOSS OF OR EXCESSIVE CLUTCH PEDAL FREE PLAY AND/OR INADEQUATE RESERVE	1. Clutch linkage out of adjustment. 2. Worn clutch disc. 3. Bent or cracked equalizer bar.	1. Adjust clutch linkage. 2-3. Replace worn or defective parts.
CLUTCH PEDAL HANG UP OR EXCESSIVE CLUTCH PEDAL EFFORT	CLUTCH 1. Incorrect assist spring over center adjustment. 2. Assist spring not positioned properly. 3. Binding at pedal support bracket, or equalizer rod at firewall. RELEASE BEARING 1. Lack of lube on transmission input shaft bearing retainer.	1. Adjust over center spring and clutch total travel. 2. Install correctly. 3. Lubricate with engine oil or replace support bracket bushing if defective. 1. Clean and lubricate retainer with thin coat of Lithium base grease (no Polyethylene).
CLUTCH NOISY WHEN PEDAL FREE TRAVEL IS TAKEN OUT, ENGINE RUNNING	1. Release bearing failure due to: A. Improper travel adjustment B. Bearing cocked on hub C. Release lever out of plane. D. Flywheel housing misalignment. E. Excessive crankshaft end play.	1. Correct release bearing. A. Adjust travel to specification. B. Install correctly. C. Check fulcrum plate and return spring. Install correctly. D. Align to specification. E. Repair to specifications.
CLUTCH NOISY WITH ENGINE OFF	1. Insufficient lubricant on assist spring seats. 2. Clutch assist spring clunking. 3. Binding at pedal support bracket or equalizer rod at fire wall.	1. Lubricant linkage and/or spring seats. 2. Lubricant spring ends. 3. Lubricate with engine oil or replace support bracket bushing if defective.
CLUTCH SLIPS OR CHATTERS	1. Incorrect pedal free travel. 2. Worn or contaminated clutch lining. 3. Grease or oil on clutch facings from: A. Release bearing B. Engine C. Release lever D. Pilot bearing E. Transmission	1. Adjust travel to specification. 2-3. Replace defective parts. (If grease or oil is causing the clutch to slip, replace the disc. Remove the grease or oil from the pressure plate and re-use if it is not burned or scored).
THUD	1. Excessive engine crankshaft end play.	1. Repair to specification.
CLUTCH PEDAL SCRUBBING—ENGINE OFF	1. Pedal push rod rubbing on firewall felt and insulator. 2. Pedal shaft binding at support bracket. 3. Lack of lube on transmission input shaft bearing retainer.	1. Lubricate and check clearance. 2. Lubricate with engine oil or replace support bracket bushing if defective. 3. Clean and lubricate retainer with a thin coat of Lithium base grease (no Polyethylene).

CLUTCH DISC

Inspect the clutch disc facings for oil or grease. ELIMINATE THE SOURCE OF ANY OIL OR GREASE BEFORE REPLACING THE DISC. An excessive amount of grease in the pilot bushing or release bearing hub will find its way to the disc facings. Too much lubricant in the transmission or a plugged transmission vent will force lubricant out the input shaft and onto the disc facings. Likewise, lubricant leaks from the rear of the engine will also find their way to the clutch disc facings.

Inspect the clutch disc for worn or loose facings. Check the disc for distortion and for loose rivets at the hub. Check for broken springs. Springs loose enough to rattle will not cause noise when the car is operating. Replace the disc assembly if any of these defects are present. BE ESPECIALLY CAREFUL WHEN INSTALLING THE DISC NOT TO CONTAMINATE IT WITH OIL OR GREASE.

PILOT BUSHING

Check the fit of the clutch pilot bushing in the bore of the crankshaft. The bushing is pressed into the crankshaft and should not be loose. Inspect the inner surface of the bushing for wear or a bell-mouthed condition. If the bushing is worn or damaged, replace the bushing.

FLYWHEEL HOUSING ALIGNMENT

Alignment of the flywheel housing bore and rear face with the engine should be checked as a possible cause of any of the following: excessive transmission gear wear; transmission jumping out of gear especially third gear; drive line vibration; excessive pilot bushing wear; noisy release bearing; or excessive clutch spin time.

Maximum "face" runout is 0.009″ and maximum "bore" runout is 0.015″. (See Figure 3.) Not more than 0.010 inch thickness shims may be used between the flywheel housing and the engine to bring the face and bore alignment within specifications. If a 0.010 inch shim will not bring the face and bore alignment within specifications, replace the flywheel housing.

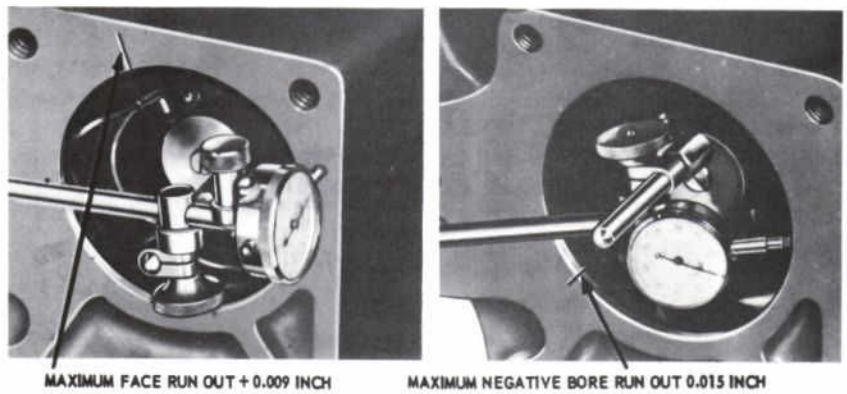


Figure 3—Flywheel Housing Alignment Check

ADJUSTMENTS

CLUTCH PEDAL (Ford)

Adjust the clutch pedal free travel whenever the clutch does not disengage properly, or when new clutch parts are installed. Clutch free play (free travel) is the distance the clutch pedal pad travels from the top (released)position until the release bearing contacts the pressure plate fingers. At this point, a definite resistance can be felt. Improper adjustment of the clutch pedal is one of the most frequent causes of clutch failure and can be a contributing factor in some transmission failures. The over-center assist spring will not normally require adjustment and should not be disturbed; however, if the assist for clutch engagements or disengagements (pedal efforts) is not correct or pedal return action is erratic, an adjustment may be necessary. Also, if the linkage is removed or replaced, the adjustment should be checked.

Assist Spring

1. With the clutch pedal against its bumper (pedal released), measure the distance between the assist spring bracket and the equalizer upper lever. (Figure 4). The distance should be 0.136 inch. It may be necessary to depress the clutch pedal to insert the feeler gauge.
2. To decrease the gap, loosen the rearward nut and tighten the front nut.
3. To increase the gap, loosen the forward nut and tighten the rearward nut. NOTE: This adjustment will affect clutch free travel, however, do not use this adjustment to set free travel since this will result in an improper assist spring gap and will therefore harmfully affect pedal efforts.
4. After a gap of 0.136 inch has been established, tighten all nuts, being careful not to change the adjustment.
5. Remove the feeler gauge.

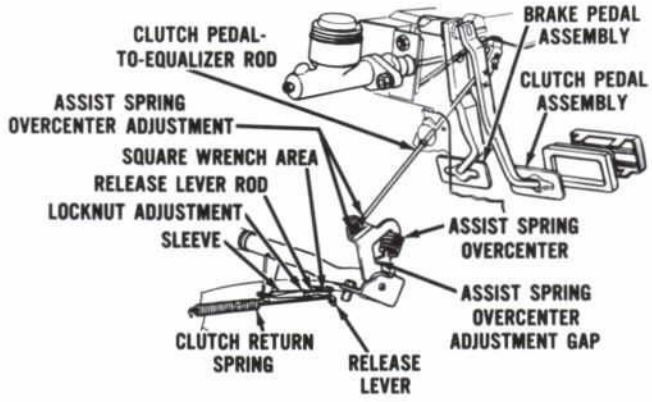


Figure 4–Ford Clutch Pedal and Linkage Adjustment

Free Travel

Check the free travel after adjusting the assist spring gap. Free travel should be 1 to 1¼ inches without the engine running. If necessary to adjust the free travel, adjust at the release lever pushrod location.

1. Disconnect the clutch return spring from the release lever. Loosen the release lever rod locknut 3 or 4 turns.
2. If there is no free travel, shorten the rod (by turning at the square wrench area) until it is free of the clutch release lever.
3. Move the clutch release lever rearward until the release bearing lightly contacts the clutch pressure plate release fingers. Adjust the rod length until the rod just contacts its seat in the release lever.
4. Adjust the locknut to obtain approximately 0.206 inch clearance between the nut and the rod sleeve end. Turn the rod at the square wrench area until the nut just contacts the rod sleeve end.
5. Tighten the locknut against the sleeve while holding the rod with a wrench. Install the clutch return spring.
6. Check the clutch free travel without the engine running. It should be 1 to 1¼ inches. As a final check, measure the free travel with the engine idling at about 3000 rpm. If the free travel is not a minimum of ½ inch, readjust the clutch pedal free travel. Otherwise, the release fingers may contact the release bearing continuously, resulting in premature bearing and clutch failure.
7. Without disturbing the assist spring, lubricate each spring seat with grease. (Ford part number C1AZ-19590-B.)

CLUTCH PEDAL (Falcon, Fairlane & Mustang)

Adjust the clutch pedal free travel whenever the clutch does not disengage properly, or when new clutch parts are installed. Clutch free play (free travel) is the distance the clutch pedal pad travels from the top (released) position until the release bearing contacts the pressure plate fingers. At this point, a definite resistance can be felt.

1. Disconnect the clutch return spring from the release lever.
2. Loosen the release lever rod locknut (Figures 5 and 6).
3. Turn the adapter portion of the adjusting assembly until a firm resistance is felt. The release bearing is now contacting the clutch pressure plate fingers (levers).
4. Back the locknut off (forward) and insert a feeler gauge (0.128 inch thick for 8 cyl.; 0.178 inch thick for 6 cyl.) against the back face of the rod adapter. Then, tighten the locknut finger-tight against the gauge.
5. Remove the feeler gauge. Hold the locknut in position and tighten the adapter against the nut. Torque the adapter 10-15 ft.-lbs.
6. Install the clutch return spring.
7. Check the free travel at the pedal. It should be from ⅞ to 1⅛ inches. Readjust if necessary.
8. As a final check, measure the pedal free travel with the transmission in neutral and the engine running at about 3000 rpm. If the free travel is not a minimum of ½ inch, readjust. Otherwise, the release fingers may contact the release bearing continuously, resulting in premature bearing and clutch failure.

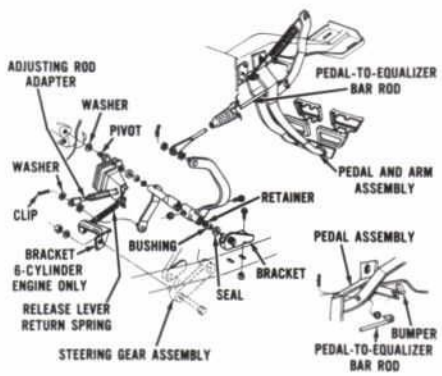


Figure 5–Falcon, Fairlane Clutch Pedal and Linkage Adjustment

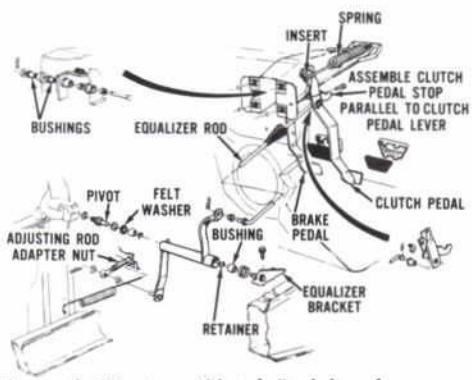


Figure 6–Mustang Clutch Pedal and Linkage Adjustment

FAIRLANE GT AND GTA 4-V CARBURETOR SPECIFICATIONS

This new type carburetor is similar to the dual 4-V carburetor used on the 427 engines. However, it has several unique features: the fuel inlet system, center hinged float, external vent rod and the automatic choke filtering air pick-up tube.

The carburetor can be considered as two dual-carburetors; one supplying a fuel-air mixture throughout the entire range of operation (primary stage), and the other functioning only when a greater quantity of fuel-air mixture is required (secondary stage).

The fuel inlet system contains an external fuel distribution tube that routes fuel from the primary fuel inlet to the secondary fuel inlet.

The primary fuel bowl is vented during curb and off-idle engine operation through a poppet valve, actuated by a lever on the throttle shaft.

CARBURETOR SPECIFICATIONS

Engine	Transmission	Identification Number	Type
390 V-8 GT	Manual	C6OF-9510-M	4V
390 V-8 GTA	Automatic	C6OF-9510-N	4V

THROTTLE BORE DIAMETER-Inches
PRIMARY AND SECONDARY
C6OF-9501-M and N 1 9/16

VENTURI DIAMETER-Inches
PRIMARY
C6OF-9510-M and N 1¼
SECONDARY
C6OF-9510-M and N 1 5/16

MAIN METERING JET IDENTIFICATION NO.
PRIMARY
C6OF-9510-M and N 68
SECONDARY
C6OF-9510-M and N 71

POWER VALVE IDENTIFICATION NO.
C6OF-9510-M and N 65

POWER VALVE TIMING—Inches of Mercury (Hg)
STARTS TO OPEN
C6OF-9510-M and N ..... 6 to 8

ACCELERATOR PUMP SETTING—Primary Throttle Lever
C6OF-9510-M ..... No. 2
C6OF-9510-N ..... No. 1

ACCELERATOR PUMP LEVER CLEARANCE
C6OF-9510-M and N
0.015 inch between lever and screw with plunger lever depressed and throttle plate wide-open.

CHOKE THERMOSTATIC SPRING IDENTIFICATION
C6OF-9510-M and N 58L 1

CHOKE SPRING HOUSING SETTING
C6OF-9510-M and N ..... Set at index

DRY FLOAT SETTING—PRIMARY AND SECONDARY
C6OF-9510-M and N
Center of float an equal distance from top and bottom inside edges of fuel bowl with fuel bowl inverted

FUEL LEVEL SETTING (WET)—PRIMARY AND SECONDARY
C6OF-9510-M and N
Lower edge of sight plug

SECONDARY THROTTLE PLATE (LEVER) SETTING
C6OF-9510-M and N
1/2 turn in after screw contacts lever

INITIAL IDLE MIXTURE ADJUSTMENT
C6OF-9510-M and N
1 to 1½ turns outward after lightly seating needle

CURB (HOT ENGINE) IDLE SPEED ADJUSTMENT—Rpm[1]
C6OF-9510-M ..... 575 to 600 with shift lever in neutral
C6OF-9510-N ..... 475-500 with shift lever in neutral
[1]With headlamps turned on, air conditioner (if so equipped) operating at maximum pressure and engine at normal operating temperature.

FAST IDLE SPEED ADJUSTMENT—Rpm[2]
C6OF-9510-M ..... 1200 with shift lever in neutral
C6OF-9510-N ..... 1300 with shift lever in neutral
[2]With headlamps turned on, air conditioner (if so equipped) operating at maximum pressure and engine at normal operating temperature.

ANTI-STALL DASHPOT (IF SO EQUIPPED) CLEARANCE—Inches[3]
C6OF-9510-N ..... 0.060 to 0.090
[3]Clearance between plunger and throttle lever at curb idle and plunger depressed.

FUEL BOWL VENT VALVE CLEARANCE—Inches[4]
C6OF-9510-M and N ..... 0.070 to 0.090
[4]Clearance between valve and fuel bowl with engine at curb idle speed.

AIR CLEANER SPECIFICATIONS

COLOR: 390 4V, V-8 ..... Blue and Chrome
TYPE ..... Dry

TECHNICAL SERVICE BRIEFS

ANTI-STALL DASHPOT USAGE

This article is presented to clarify the usage of anti-stall dashpots on Ford, Fairlane, Falcon, Mustang and Thunderbird models.

Anti-stall dashpots, by means of a spring loaded diaphragm, retard the closing rate of the throttle plate when the foot is taken off the accelerator pedal. The delay is necessary because if the throttle plate was allowed to close immediately after the foot was removed from the accelerator pedal, an extremely over-rich air fuel mixture would result and cause stalling under certain conditions. Retarding the closing rate of the throttle plate gives the engine time to use up the extra fuel and prevents stalling.

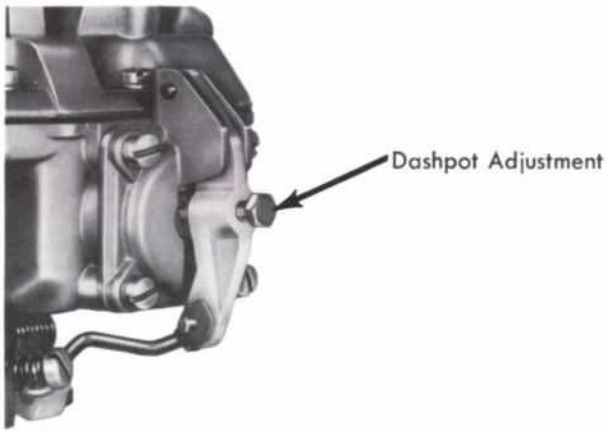


Figure 1—Ford 1-V Integral Anti-Stall Dashpot

The following five points should clarify whether or not a car should be equipped with an anti-stall dashpot:

- ALL cars equipped with Thermactor use a dashpot.
- ALL cars equipped with Air Conditioning use a dashpot.
- Cars equipped with an Automatic Transmission AND rod-type accelerator linkage (Falcon, Fairlane, Mustang, Thunderbird and some 1965 Fords) use a dashpot.
- Some 1965 and *all* 1966 Ford models use cable-type accelerator linkage, and hence do not use a dashpot, if equipped with an automatic transmission.
- Single barrel (1-V) carburetors have an integral built-in dashpot (Figure 1). Multi-barrel carburetors have an external dashpot (Figure 2).

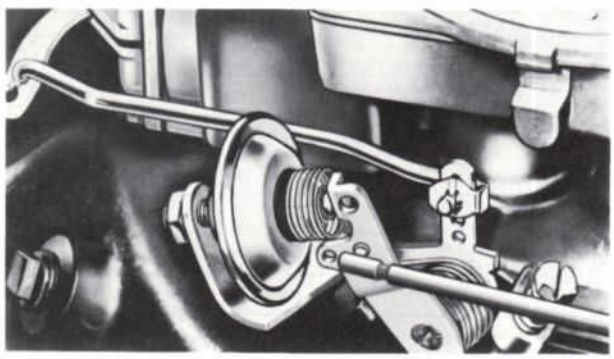


Figure 2—Ford 2-V and 4-V Anti-Stall Dashpot

COMBUSTION CHAMBER CONDITIONER

This new product is specifically designed to:

- Remove gums and other deposits from the fuel induction system.
- Free sticking valves and sluggish compression rings.
- Purge excessive deposits from the combustion chambers. *Use Combustion Chamber Conditioner* prior to every motor tune-up for smoother idle and increased performance. Remember a dirty motor cannot be tuned properly!

Directions

1. Allow can of cleaner to warm up to room temperature before spraying and shake occasionally during application.
2. Run engine until normal operating temperature is reached . . . then set at a fast idle of 700 to 800 rpm.
3. Remove air cleaner.
4. Apply cleaner directly by spraying into entire carburetor air intake area. (Choke plate and shaft, main throttle plate and shaft, and carburetor throat and venturi). On four barrel carburetors, spray a small amount into the secondary side. Spray rapidly and constantly, but do not let engine stall until can is empty.
5. When can is empty, immediately turn off ignition key and let engine stand for five minutes.
6. Restart engine, open and close throttle rapidly within safe limits for two minutes.
7. Adjust carburetor to normal specified idle.

NOTE: Exhaust venting precautions should be used when the above service is to be performed inside a building.

NEW SIMPLIFIED MUFFLER APPLICATION GUIDE

...47 fewer part numbers...wider model application for 1960-1964 models... new low priced standard steel muffler now available.

A complete new simplified line of FoMoCo "Aluminized Steel" mufflers featuring new and wider applications that greatly reduce the number of mufflers required to service all 1960-1964 passenger cars are now available. Only a few part numbers are needed to service all types exhaust systems on all 1960-1964 passenger cars. These new mufflers are the same premium quality, original equipment type at no increase in price. Only the end caps have been changed to accommodate various style hangers.

For popular 1960-1964 Ford model passenger cars, a new high quality low priced standard steel muffler is available for customers who may not require the longer life feature of the Aluminized Steel type. These models are indicated by a * in the chart below.

Thunderbird mufflers are stainless steel for even longer life and greater durability.

Model and Body Type	Engine No. of Cyl. C.I.D.	Part No.	Side R (right) L (left)	Type S (single) D (dual)
	1960			
Ford All types	6 Cyl. 223 8 Cyl. 352	C0AZ-5230-A*	L & R	S & D
Thunderbird All Types	8 Cyl. 352, 430	B9S-5230-A	L & R	D
Falcon Tudor and Fordor	6 Cyl. 144	C1DD-5230-C	R	S
Falcon Ranch Wagons, Ranchero, Sed. Del.	6 Cyl. 144	C3DZ-5230-A	R	S
	1961			
Ford All Types	6 Cyl. 223	C0AZ-5230-A*		S
Ford All Types	8 Cyl. 292, 352, 390	C0AZ-5230-A*	L & R	D
Thunderbird All Types	8 Cyl. 352, 430	C1SZ-5230-A C1SZ-5230-B	R L	D D
Falcon Tudor and Fordor	6 Cyl. 144, 170	C1DD-5230-C	R	S
Falcon Ranch Wagons, Ranchero, Sed. Del.	6 Cyl. 144, 170	C0DZ-5230-A	R	S
	1962			
Ford All Types	6 Cyl. 223 8 Cyl. 292, 352, 406	C0AZ-5230-A*	L & R	S & D
Fairlane All Types	6 Cyl. 170 8 Cyl. 221	C2OZ-5230-J	R	S
Fairlane All Types	8 Cyl. 260	C4OZ-5230-C	R	S
Thunderbird All Types—"before 10/16/61"	8 Cyl. 390	C1SZ-5230-A C1SZ-5230-B	R L	D D
Thunderbird All Types—"from 10/16/61"	8 Cyl. 390	C2SZ-5230-A C2SZ-5230-B	R L	D D
Thunderbird All Types	8 Cyl. 390 with 6/V carb.	C1SZ-5230-A C1SZ-5230-B	R L	D D
Falcon All Types	6 Cyl. 144, 170	C0DZ-5230-A	R	S
	1963			
Ford All Types	6 Cyl. 223 8 Cyl. 260, 289, 352, 390, 406, 427	C0AZ-5230-A*	L & R	S & D

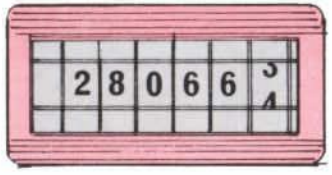
Model and Body Type	Engine No. of Cyl. C.I.D.	Part No.	Side R (right) L (left)	Type S (single) D (dual)
	1963			
Fairlane All Types	6 Cyl. 170, 200 and 8 Cyl. 221, 260	C2OZ-5230-J	L & R	S
Fairlane All Types exc. S/W	8 Cyl. 289 with 4/V	C4OZ-5230-E	R	S
Thunderbird All Types	8 Cyl. 390 with 4/V	C3SZ-5230-A		S
Thunderbird All Types	8 Cyl. 390 with 6/V	C3SZ-5230-B C3SZ-5230-C	R L	D D
Falcon Fordor, Tudor, Ranch Wgn., Ranchero, Sed. Del., Convert.	6 Cyl. 144, 170	C0DZ-5230-A	R	S
Falcon All Types—exc. S/W, Sed. Del. and Ranchero	8 Cyl. 260	C3DZ-5230-E	R	S
Falcon S/W, Sed. Del. and Ranchero	8 Cyl. 260	C3DZ-5230-B	R	S
Falcon Tudor H/T "Futura" Sprint and Convert. Sprint	8 Cyl. 260	C3DZ-5230-D	R	S
	1964			
Ford All Types exc. S/W and Convert. "from 2/17/64"	6 Cyl. 223, 8 Cyl. 289, 352, 390, 427	C0AZ-5230-A*	L & R	S & D
Ford S/W and Convert. "from 2/17/64"	8 Cyl. 289, 352	C4AZ-5230-T	L	S
Fairlane All Types with exceptions below:	6 Cyl. 170, 200 8 Cyl. 260, 289	C2OZ-5230-J	L & R	S
Fairlane All high perf. exc. Stn. Wgn. "before 4/13/64"	8 Cyl. 289 4/V	C4OZ-5230-E	R	S
Fairlane All Types exc. S/W—Arvinode—"from 4/13/64"	8 Cyl. 289 4/V	C4OZ-5230-F C4OZ-5230-G	R L	D D
Thunderbird All Types	8 Cyl. 390	C4SZ-5230-A C4SZ-5230-B	R L	D D
Falcon All Types (with exceptions below):	6 Cyl. 144, 170 8 Cyl. 260	C4DZ-5230-F	R	S
Falcon Ranch Wagons, Ranchero, Sed. Del.	6 Cyl. 144, 170	C0DZ-5230-A	R	S
Falcon Ranch Wagons, Ranchero, Sed. Del.	8 Cyl. 260	C3DZ-5230-E	R	S

Body Type Abbreviations: R/W—Ranch Wagon, S/W—Station Wagon, H/T—Hard Top, Convert.—Convertible, Sed. Del.—Sedan Delivery, P/I—Police Interceptor

*Lower price standard steel muffler use part number C0AZ-5230-B

LITHO IN U.S.A.

LET US SAFETY CHECK YOUR CAR FOR THESE SIGNS OF SHOCK FAILURES:



YOUR MILEAGE

Over 20,000 miles . . . or two years . . . since you've had new Shocks? Surveys show that 3 out of 5 cars in this group need new Shock Absorbers NOW!

FLUID LEAKS, UNEVEN TIRE WEAR

Faulty Shocks cut tire life by up to 17% . . . and leaking fluid and uneven tire wear are sure signs that Shock Absorbers aren't doing a job!

WANDERING, BOBBING, SHIMMY

Wandering tendencies on winding roads, "bobbing" stops, wheel-shaking shimmy—all clues that tell you to replace your worn out Shocks!

WE HAVE SAFETY CHECKED YOUR CAR AND FOUND THE FOLLOWING CONDITIONS:

_____

We can install new shock absorbers on your car in _____ minutes for only $_____.

REPLACE WITH AUTOLITE SHOCK ABSORBERS

PRODUCTS OF Ford

SOLD AND INSTALLED BY

FORM NO. SA-2012

WHAT SINGLE FEATURE MAKES AUTOLITE SHOCK ABSORBERS BEST FOR YOU?

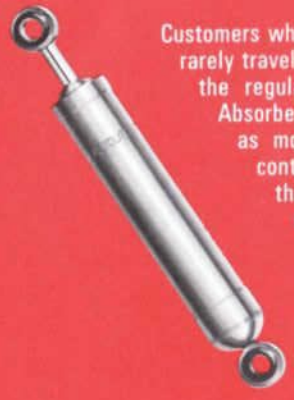
THE NAME BEHIND THEM

Ford

The name, FORD MOTOR COMPANY, behind every Autolite Shock Absorber—that's what makes them best for you! Ford's Autolite Division makes use of one of the world's largest automotive testing and development facilities. Imaginative engineering, grueling testing, painstaking refinements add up to *proved quality!* Quality that's built into every AUTO-FLEX and SUPER-FLEX Shock Absorber.

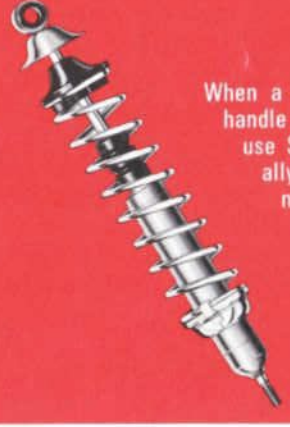
But that's not all! Autolite engineers also realize that miles have taken a toll on your car. Springs begin to tire. Suspensions are looser. So Autolite matches these changed conditions with Shock Absorbers that have all the features of Autolite's superb Ford Original Equipment Shocks . . . but with performance to meet your *present* needs! Another convincing proof that Autolite Shock Absorbers are best for all cars . . . BEST for YOU!

AUTOLITE OFFERS A SHOCK ABSORBER TO MEET EVERY NEED



Customers who want a reasonably soft "new car" ride and rarely travel at sustained high speeds will probably prefer the regular AUTO-FLEX ride. This all-around Shock Absorber is capable of handling the same heavy loads as most extra-heavy-duty units, but with normal control forces for a better feeling ride. In general, the standard AUTO-FLEX Heavy Duty line will meet most needs for cars that have seen at least two years of service. And they'll provide slightly more control for customers who dislike the soft, "willowy" new car ride of some Original Equipment Shocks.

AUTO-FLEX XD is just the ticket for customers who want the better handling at higher speeds or with heavy loads that only a more firm Shock Absorber can give. This Shock Absorber is also ideal for customers who haul travel trailers with equalizer-type hitches that take up the extra load . . . but still require extra damping of spring jounce and rebound forces. In addition, the firm control of the AUTO-FLEX XD limits suspension travel, giving reduced wear and longer life for ball joints, springs and steering linkage. On older cars, they also prevent frequent bottoming of weakened springs.



When a true load booster Shock Absorber is needed to handle up to a half-ton of extra weight on rear wheels, use SUPER-FLEX! Its three-stage operation automatically adapts to all kinds of loads. A smooth ride with no "tail up" look under normal loads. More overload protection than competitive units. No jarring "bottoming-out" on bumps with heavy loads.

EXTRA QUALITY FOR EXTRA SAFETY WITH AUTOLITE

It's a fact . . . poor shock absorbers can destroy the precise road-holding ability that's designed into your car. So why gamble with your safety? It's so easy, so economical to replace with Autolite Shock Absorbers—the quality line that brings you so many *exclusive* benefits!

Want some examples? In the standard AUTO-FLEX unit, the pressure tube—the heart of the Shock Absorber—is over twice as strong as an average tube. Its interior walls have a super-fine burnished finish that protects the long life performance of the precision ground piston.

A husky ½-inch diameter piston rod of hardened steel has a polished finish that combats corrosion, wear, stone damage—major causes of failure with other units. A costly welding process gives added strength to joints.

Special valving gives automatic 3-stage ride control. AUTO-FLEX fluid capacity is up to double that of ordinary shocks—absorbs more heat to perform better, quieter, under hard use. And Autolite's Constant Viscosity Blend fluid gives a uniform ride in any weather—summer heat or winter cold.

Autolite Shock Absorber components are designed to meet and exceed original equipment specifications . . . to bring you advantages that other replacement units can't match! That's why we say . . . *you're always right with AUTOLITE!*