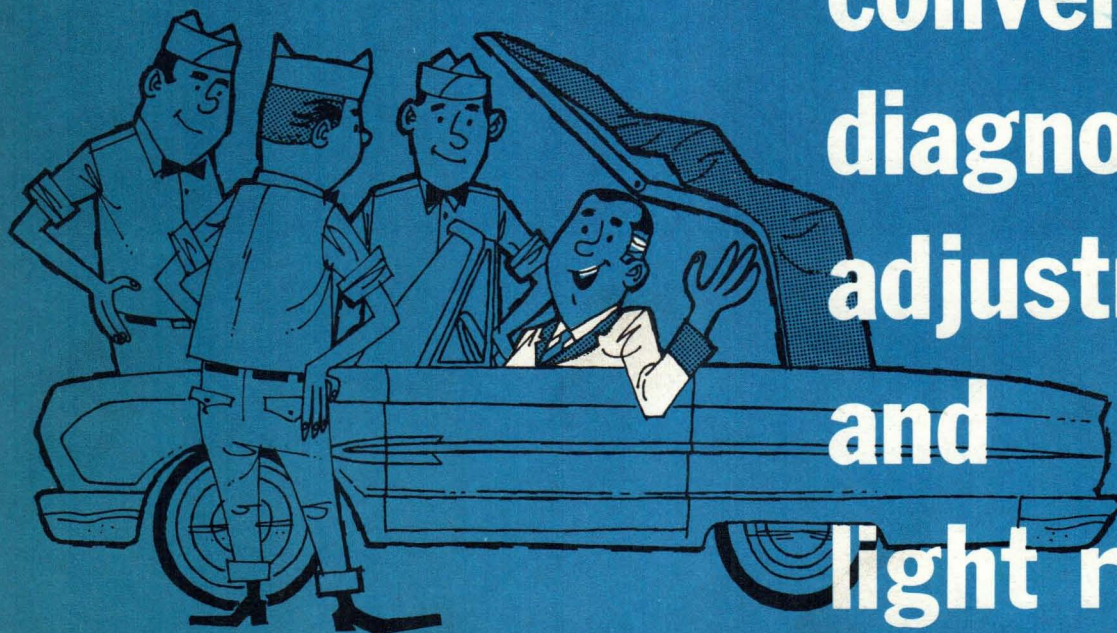


THE FORD SERVICE MANAGER'S MEETING LEADER'S INSTRUCTION BOOK

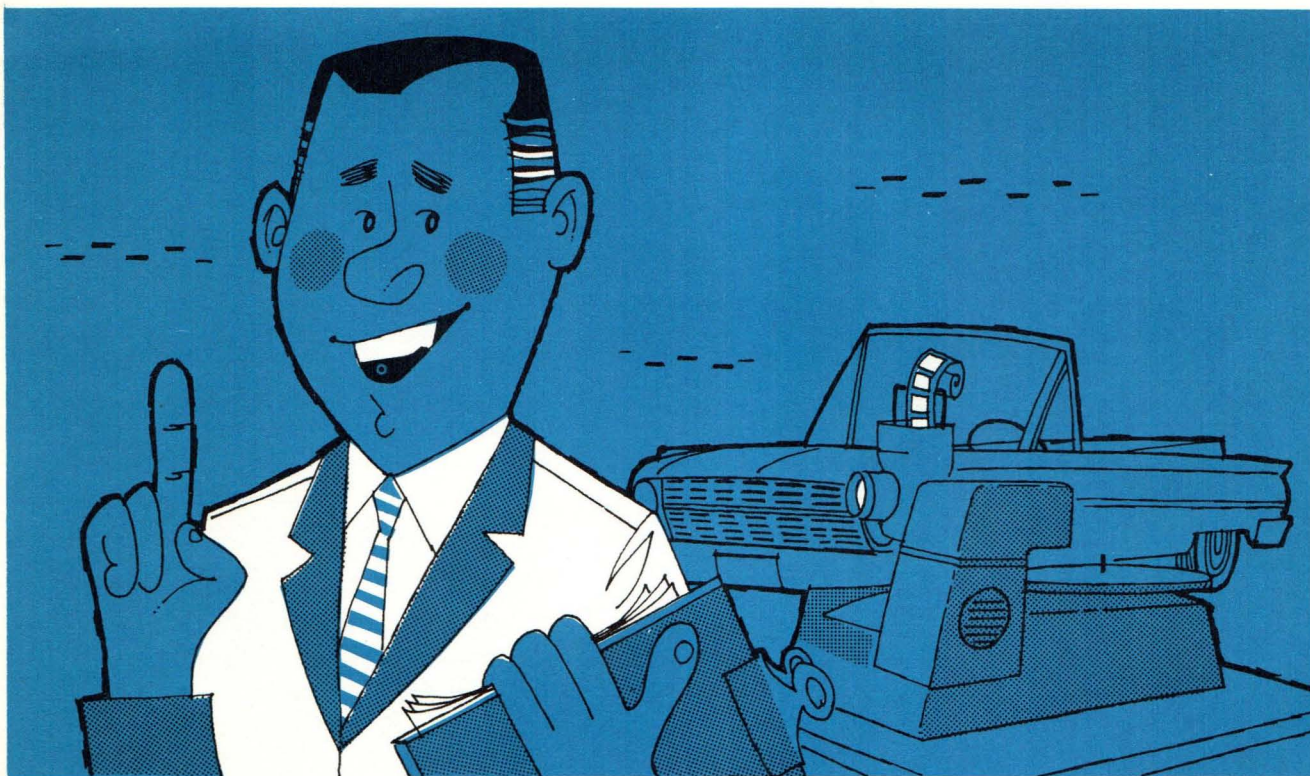
FALCON convertible top diagnosis, adjustment, and light repair



FORD SERVICE FORUM - NO. 1

FALCON CONVERTIBLE TOP DIAGNOSIS, ADJUSTMENT, AND LIGHT REPAIR:

What the Technician is to be Taught		Medium Through which Technician is Taught	
WHAT THE TECHNICIAN SHOULD KNOW	WHAT THE TECHNICIAN SHOULD BE ABLE TO DO	DISCUSSION TOPICS	ASSIGNMENTS
1 Convertible top electrical system parts and their location. 2 The convertible top system a. Tests or checks 1. Visual 2. Mechanical 3. Electrical 4. Hydraulic b. Operation 1. Mechanical 2. Electrical 3. Hydraulic c. Service 1. Adjustments 2. Removal and installation 3. Disassembly and assembly	1 Identify the parts of the convertible top system.	1 Convertible top a. Description b. Electrical system c. Hydraulic system d. Checks 1. mechanical 2. electrical 3. hydraulic	1 Oral quiz. Demonstration of several checking procedures, each by a different technician.
	2 Check the mechanical system for misalignment and make adjustments.	2 Mechanical adjustments a. Header area b. Balance link c. Main pivot bracket d. Side rail weatherstrip	2 Demonstration of several adjustments, each by a different technician.
	3 Check battery for state-of-charge.		
	4 Charge battery if necessary.	3 Hydraulic system components a. Description b. Operation c. Service	3 Demonstration of motor and pump repair. Oral Quiz on lift cylinder replacement.
	5 Make electrical checks of the convertible top system. a. current draw b. continuity tests		
	6 Check hydraulic system. a. visual checks b. operational checks	4 Back curtain window and slide fastener a. Description b. Replacement	4 Oral Quiz.
		5 Care and cleaning a. Cleaning b. Storage (in car) c. Other care d. Warnings	5 None.



FORUM NO. 1 MATERIALS

- 1 A Slidefilm and Record . . . "Falcon Convertible Top Diagnosis, Adjustment, and Light Repair"
- 2 Service Handbook No. 20801 . . . "Convertible Tops"
- 3 This Meeting Leader's Instruction Book

FORUM EQUIPMENT NEEDED

- | | |
|---|---|
| ☐ FALCON CONVERTIBLE | ☐ JUMPER WIRE |
| ☐ BATTERY HYDROMETER | ☐ TEST LAMP—12 VOLT |
| ☐ VOLT-AMP. TESTER | ☐ GENERAL HAND TOOLS |

FORUM SCHEDULE AND ESTIMATED TIMETABLE



In meeting room:

PRELIMINARY REMARKS	5 MINUTES
SLIDEFILM PRESENTATION	15 MINUTES

In demonstration area:

1	DIAGNOSIS	30 MINUTES
	Discussion	(5 minutes)
	Oral Quiz	(10 minutes)
	Demonstration	(15 minutes)

2	TOP ALIGNMENT-DEMONSTRATION	20 MINUTES
	INTERMISSION	10 MINUTES

3	TOP MECHANISM	30 MINUTES
	Motor and Pump Repair Demonstration	(10 minutes)
	Lift Cylinder Replacement Discussion	(10 minutes)
	Quiz	(10 minutes)

Back in meeting room:

4	BACK CURTAIN WINDOW AND SLIDE FASTENER	25 MINUTES
	Discussion	(15 minutes)
	Quiz	(10 minutes)

5	CARE AND CLEANING-DISCUSSION....	15 MINUTES
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TOTAL TIME2½ HOURS

PRELIMINARY REMARKS 5 MINUTES

Try to touch upon each of these topics in your opening comments:

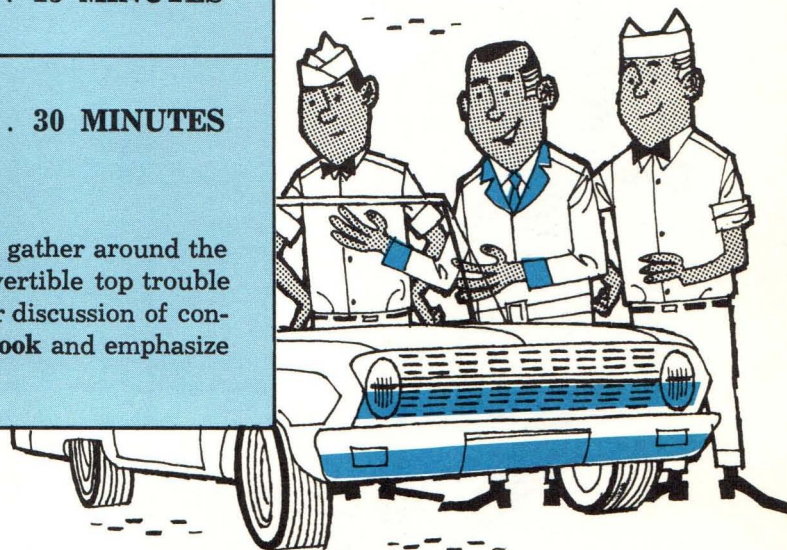
1. Subject of the Forum.
2. Description of Falcon Convertible features ...
 - a. Differences in electrical system
 - b. Differences in hydraulic system
 - c. Differences in back curtain window fasteners
3. Important service checks and repair or adjustment procedures to be covered ..
 - a. Mechanical checks
 - b. Hydraulic checks
 - c. Electrical checks
 - d. Header bow adjustment
 - e. Balance link adjustment
 - f. Main pivot bracket adjustment
 - g. Side rail weatherstrip adjustment
 - h. Motor and pump repair
 - i. Lift cylinder replacement
 - j. Back curtain window replacement
 - k. Slide fastener replacement
 - l. Care and cleaning
4. Any specific procedures you want noted in particular.
5. Introduction of slidefilm.

SLIDEFILM PRESENTATION 15 MINUTES

DIAGNOSIS 30 MINUTES

Discussion

It's time now to move to the demonstration area, gather around the Falcon Convertible, and review some of the convertible top trouble symptoms and possible causes. In continuing your discussion of convertible top diagnosis, refer to the **Service Handbook** and emphasize the following checks ...

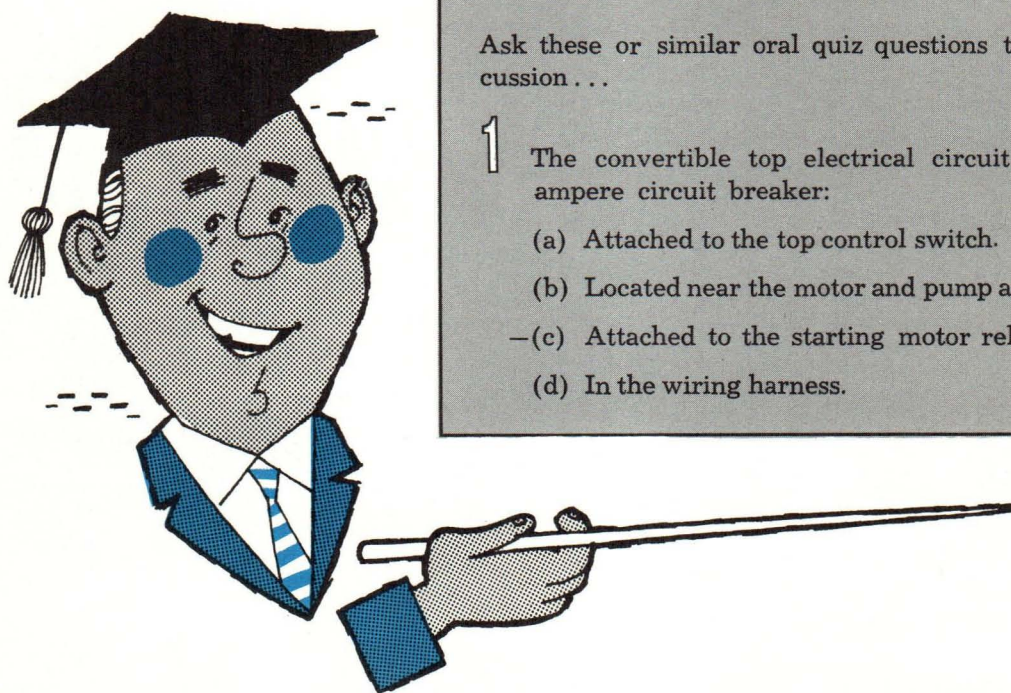


MECHANICAL	BENT OR MISALIGNED LINKAGE SIDE RAIL WEATHERSTRIP ADJUSTMENT TOP SAG ADJUSTMENT TOGGLE CLAMP ADJUSTMENT
ELECTRICAL	BATTERY CHARGE CURRENT DRAW TOP CONTROL SWITCH CIRCUIT BREAKER SWITCH-TO-MOTOR WIRES MOTOR
HYDRAULIC	FLUID LEVEL LIFT CYLINDER

ORAL QUIZ

Ask these or similar oral quiz questions to stimulate further discussion . . .

- 1 The convertible top electrical circuit is protected by a 30-ampere circuit breaker:
 - (a) Attached to the top control switch.
 - (b) Located near the motor and pump assembly.
 - (c) Attached to the starting motor relay.
 - (d) In the wiring harness.



2 If the top does not operate satisfactorily, the first item to check is:

- (a) Top control switch operation.
- (b) Battery charge.
- (c) Hydraulic fluid level.
- (d) Circuit breaker operation.

3 With the convertible top not moving during the current draw test, a low amp reading indicates:

- (a) Defective switch-to-motor wires.
- (b) Short or open circuits in the wiring harness.
- (c) A defective pump or low fluid level in the reservoir.
- (d) A faulty motor.

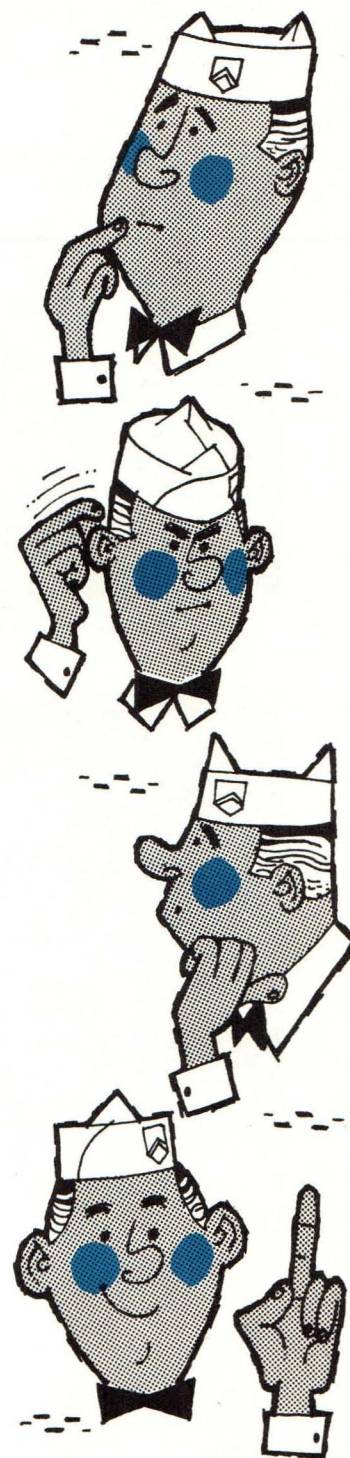
4 Operation of the motor is checked by connecting the motor leads directly to the:

- (a) Multiple connector under the instrument panel.
- (b) Battery positive terminal.
- (c) Control switch.
- (d) Main harness connector.

DEMONSTRATION

While the others watch, have different men demonstrate the following convertible top checks, or at least those which you believe are most important.

- Side rail weatherstrip adjustment
- Toggle clamp adjustment
- Current draw
- Top control switch
- Circuit breaker
- Switch-to-motor wires
- Motor



Demonstration

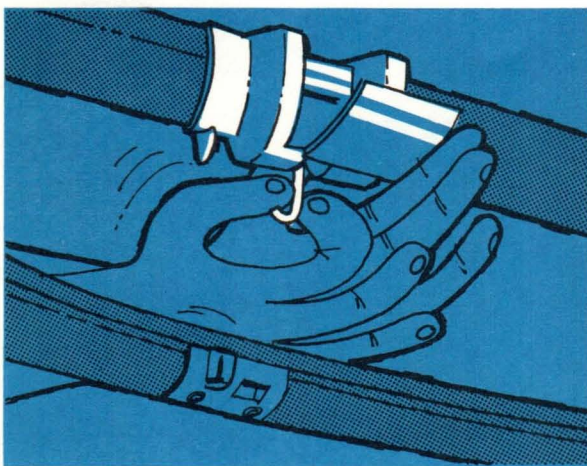
Select the top alignment procedures from among the following that you believe are most frequently needed. Have them demonstrated one at a time on the Falcon Convertible by different technicians, while the others watch. Explain the proper procedures as the adjustments are made, using the **Service Handbook** as your reference.



Header bow adjustment



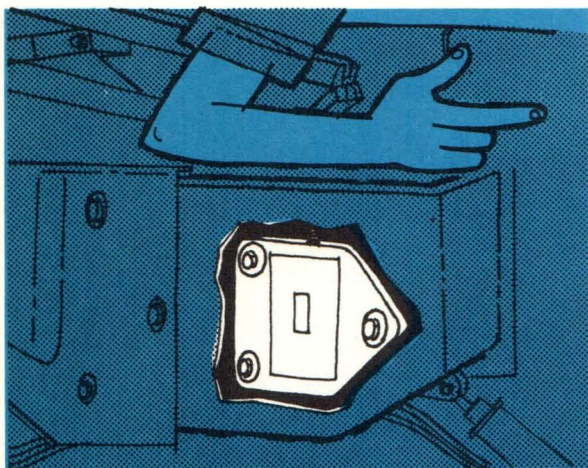
Dowel pin alignment



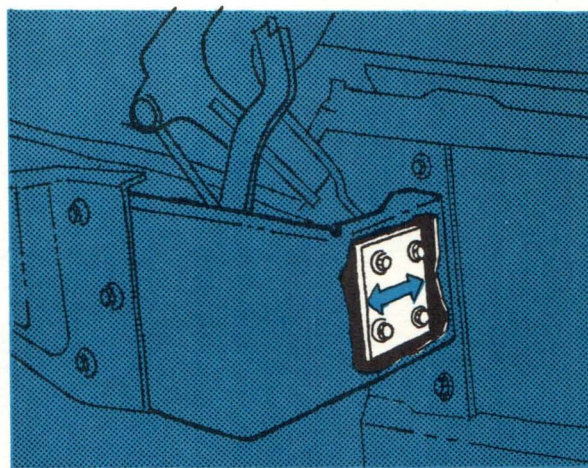
Toggle clamp adjustment



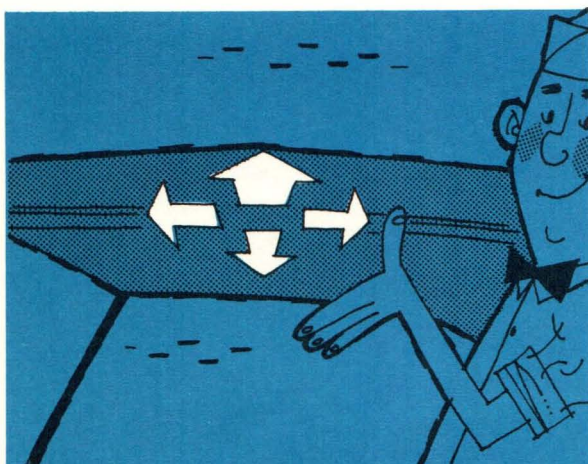
Side rail adjustment



Top stack adjustment



Main pivot bracket adjustment . . . lateral



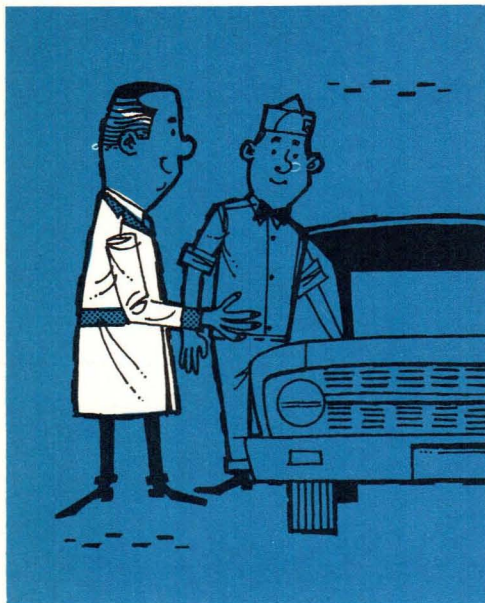
**Side rail weatherstrip adjustment
... lateral or fore and aft**



Remember to stress these points . . .

Because movement of the main pivot bracket support will disturb **several** adjustments, move this support only after other adjustments have failed to solve a specific problem.

INTERMISSION 10 MINUTES



TOP MECHANISM30 MINUTES

Motor and Pump Repair – Demonstration

Ask one man to remove the convertible top motor and pump assembly from the Falcon, another to disassemble it, the next to assemble it, and the last to install it in the demonstration car.

The correct service procedure, which you should explain to and discuss with the group during the demonstration, are outlined in the **Service Handbook**. Cover the following steps:

- **REMOVAL PROCEDURE**
- **DISASSEMBLY PROCEDURE**
- **REPAIR PROCEDURE**
- **REASSEMBLY PROCEDURE**
- **INSTALLATION PROCEDURE**

Remember to stress these points . . .

- WHEN DISCONNECTING THE HOSES, PUT ABSORBENT CLOTHS BELOW THE CONNECTORS, AND PLUG THE OPEN LINES AND FITTINGS WITH CLEAN, PROPERLY FITTING PLUGS. DRAIN FLUID INTO A **CLEAN** CONTAINER.
- AFTER REPLACING DAMAGED PARTS OF THE PUMP, BE SURE TO CLEAN ALL THE OLD PARTS CAREFULLY IN A SUITABLE CLEANING SOLVENT BEFORE REASSEMBLING THE PUMP.

Lift Cylinder Replacement — Quiz

Recalling the procedures illustrated in the slidefilm, review lift cylinder replacement procedures by means of the oral quiz technique. Use these questions—and any additional ones or substitutes you can think of—to help satisfy yourself that everyone understands the proper procedure for lift cylinder replacement. Discuss the men's answers as thoroughly as you think necessary.

During lift cylinder replacement, the top should be:

- (a) Fully raised.
- (b) Fully lowered and clamped.
- (c) Lowered but not clamped.
- (d) Half raised.

What is disconnected first?

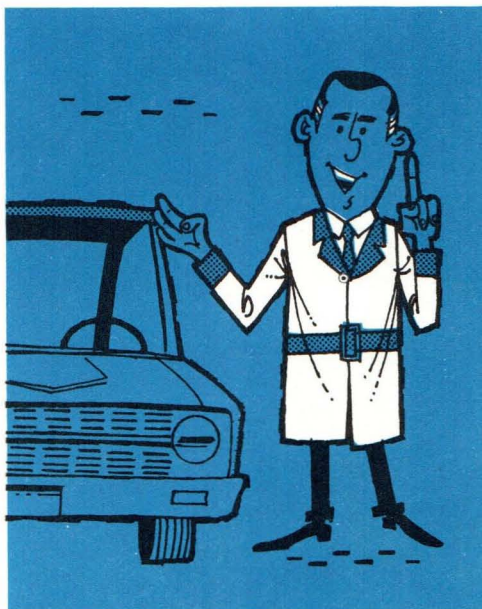
- (a) The hydraulic lines at the upper and lower ends of the old cylinder.
- (b) The hairpin clip.
- (c) The upper clevis pin.
- (d) The lower clevis pin.

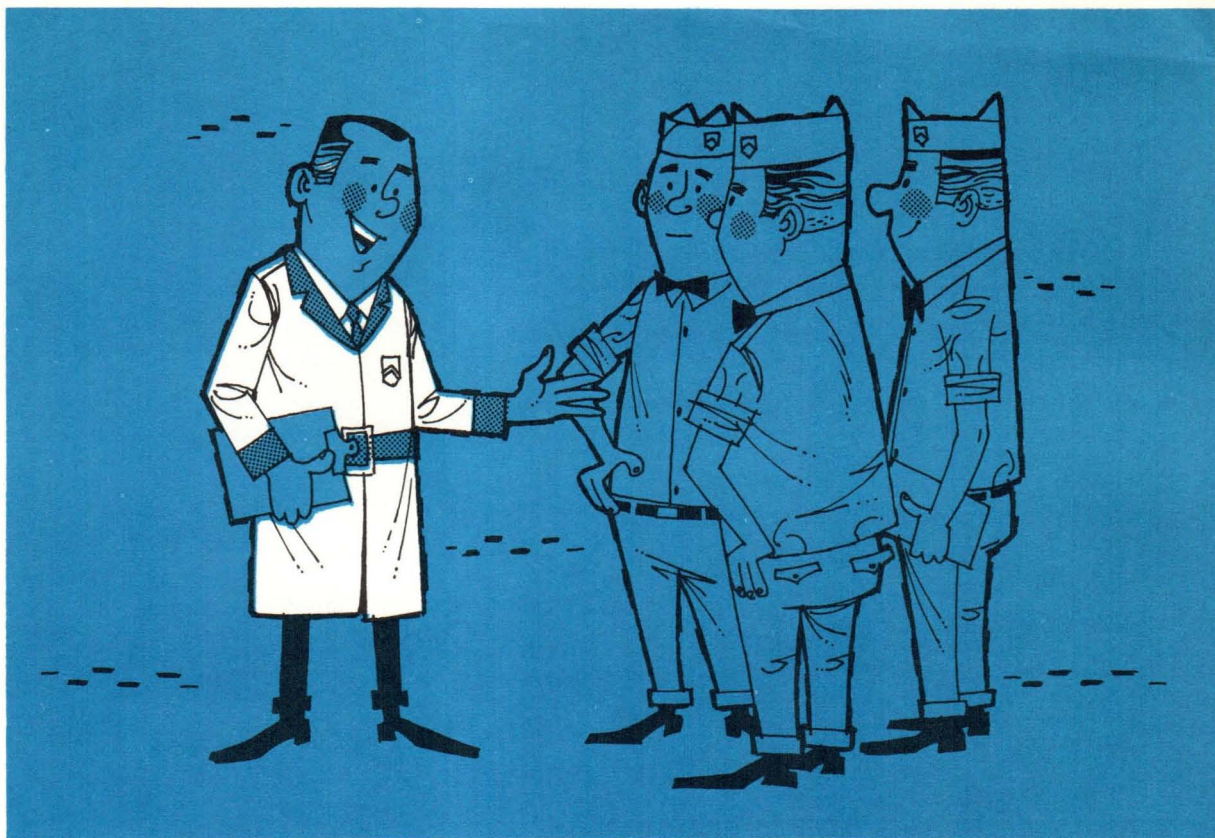
After installation of the new cylinder, which two of the following precautions should be taken?

- (a) Operate the top to bleed out air.
- (b) Check the battery charge.
- (c) Check for bottoming.
- (d) Check the fluid level.

Remember to stress this point . . .

The top must be up when the level is checked.





BACK CURTAIN WINDOW AND SLIDE FASTENER REPLACEMENT25 MINUTES

Discussion

Return to the meeting room, and begin the discussion of back curtain and slide fastener replacement procedures.

Point out that the rear windows have slide fasteners across the top only, and new Velcro nylon-type fasteners on both sides. To open the curtain window after the top fastener is released, all you have to do is pull the window away from the sides.

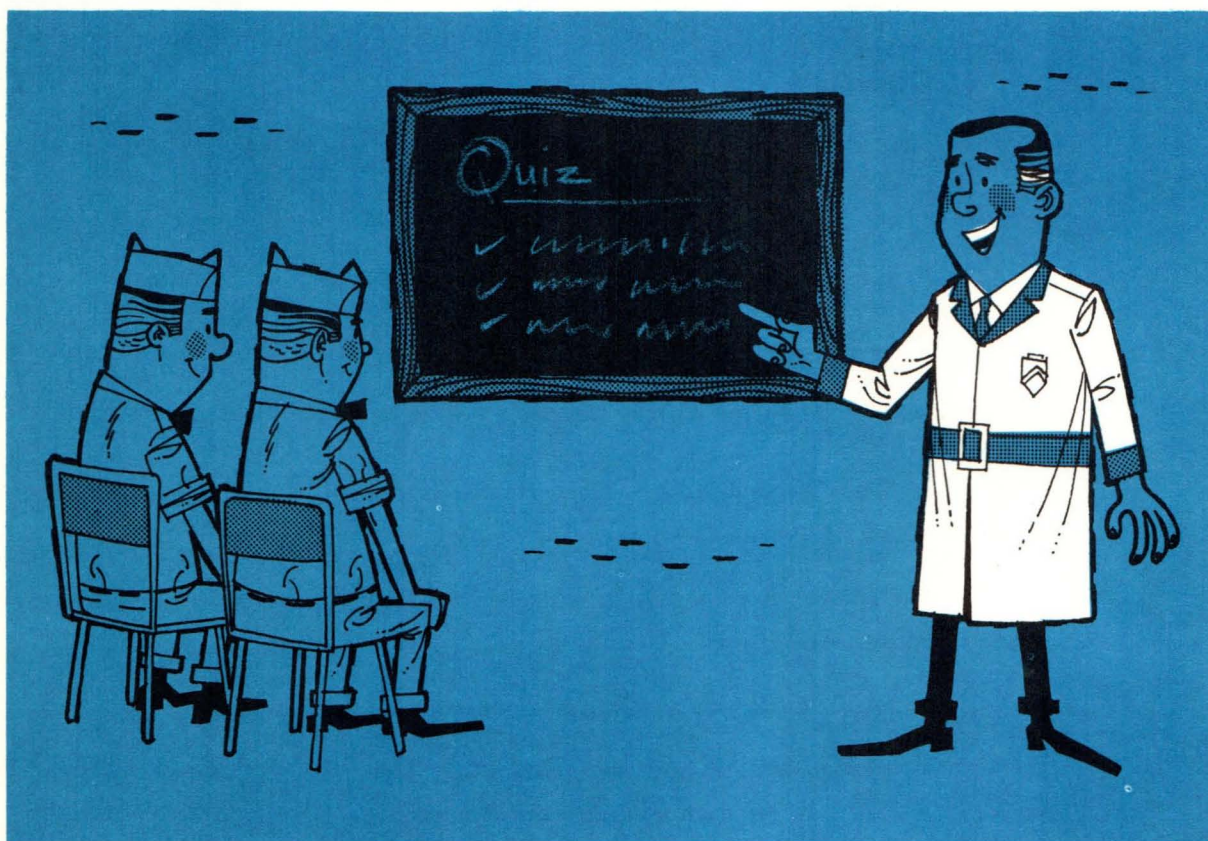
Using the **Service Handbook** as your reference, outline the replacement procedures.

Back Curtain Window Replacement Procedure

1. Removing back curtain window assembly.
2. Disassembly of the curtain window.
3. Positioning new curtain in tacking strip.
4. Reassembling the curtain window.
5. Installing the curtain assembly.
6. Adjusting the assembly.

Slide Fastener Replacement Procedure

1. Removing the fastener.
2. Positioning the new fastener.
3. Reassembling the fastener.
4. Installing the fastener.
5. Adjusting tension.



QUIZ

The answers to the following suggested questions are all contained in the **Service Handbook** material you have just discussed. The oral quiz is merely a "review" of the discussion. Add or substitute any appropriate questions of your own.

- Q. How do you remove the back curtain window from the Falcon?
- Q. What are the procedures for disassembling the curtain window assembly after it's removed from the car?
- Q. Describe assembling the curtain.
- Q. How is curtain window tension adjusted during installation?
- Q. How is the slide fastener removed?
- Q. How is it disassembled and assembled?

CARE AND CLEANING 15 MINUTES

Discussion

Describe these procedures briefly, utilizing the following suggested outline . . .

CLEANING TOP

1. Wash vinyl top each time car is washed.
2. Use lukewarm water and mild soap.
3. Use "Triple Cleaner" (Part No. C0AZ-19526-A) and soft-bristle brush for badly soiled top.
4. Protect the rear curtain window from cleaning agents by covering with protective cover.
5. Rinse top **before** cleaning to remove loose dirt and grime.
6. Work a 2 sq. ft. area at a time when using "Triple Cleaner," and carefully overlap each section to avoid streaking.

7. Rinse away first accumulated soilage after cleaning.
8. **Repeat** application and rinse each section **again**.
9. Prevent cleaner from drying on body finish to avoid streaks on paint.

CLEANING REAR WINDOW

1. Thoroughly rinse before cleaning to remove mud and loose dirt particles that could cause scratching.
2. Apply "Convertible Rear Window Cleaner" (Part No. CIAZ-19C507-A) with soft cotton cloth, rubbing briskly.
3. Allow cleaner to dry, and polish with a new soft cotton cloth.
4. Avoid letting rear window cleaner dry on painted or vinyl surfaces—remove as described in "Cleaning Top."

STORAGE

1. Use top compartment for top storage only.
2. Be sure top is dry before stacking.
3. Use boot to keep material clean, dry, and positioned when stacked.

OTHER CARE

1. Lubricate rear curtain window slide fastener twice a year with Stick Wax.
2. When making paint repairs, protect top vinyl coating from heat of 180° or more.

WARNINGS!

- Do not stack top when it is damp—mildew, stains, or shrinkage may result.
- Do not use cleaning fluids not recommended for vinyl material—damage to fabric may occur.

ADJOURN THE FORUM

SERVICE DEPARTMENT

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