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**ECON**online Organization Newsletter  
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Another day, another deadline. I always wait until last to write this first little bit, hoping that I'll think up something to say during the production, but I never do (think, that is). So I guess production wouldn't be a bad idea to start with. You've probably noticed that the format of the newsletters varies issue by issue. The reason is that we're still experimenting. Experimenting with the logo, letterhead, column headings, and production/reproduction aspects of producing a newsletter. With each newsletter, we figure out what we want to improve on for next time, and "next time" we find things we're still not happy with. And so it goes. Hope y'all like the way this issue turns out. For those that may be curious, we're doing all on our text, layout, and graphics on a Macintosh Plus computer. We're therefore as limited as it is, and as I, the user, am. Production has been alternately xerox, or straight off the printer (but that really takes a lot of computer-sitting). Enough of this.

Letters. Every now and then we do get letters that are just "Hi, how are you's" and they are **great!** For example, Jane Pannell sent me one telling me about her trip through the mid-southern states, complete with xeroxed pictures! Those pictures (of Econolines, of course) are now up on our picture board, and if we get enough good ones, Jay and I have discussed the possibility of including a picture series/spotters scrapbook in one of the newsletters. Ya never know. Another letter, from Don English, had a little different tune. Don mentioned that he had finished some negotiations with Dennis Carpenter (a Ford repro parts maker/dealer) whereby Don agreed to lend Dennis some of his new OEM rubber products so that Dennis could make up some molds and begin production. The items that Don said I could quote Dennis on as being available in 6-9 months are: front door gaskets complete with the wire inserts, and vent window gaskets. There are other things in the whispering stages, some of which will depend on how well Don can convince Dennis that the items are really needed by Econoline restorers (ie. are marketable). Here's (again) where we need to get those "ten-most-wanted" inputs from the collective membership and channel them to the appropriate places/people. Don's been through the games of writing repro and NOS dealers until blue in the face, and has a pretty good handle on what is strictly not available as new parts. If he knows what the rest of Econ0 is needing (via Jay and I), then perhaps he can direct Dennis toward reproducing some of those items we all need.

Off my soapbox, and onward. Talking about parts kind of leads me into letting me tell you about our next issue of the newsletter. Our most asked question seems to be something like this: "What's the poop on the NOS and repro parts dealers?: Who has what?: and Who is reputable?". We'll try to get an-

swers to these questions and to present some ideas on alternate parts sources, some parts interchanges, and share some of the ways we and others have found to solve problems. As part of this, we would like to know what experiences our members have had with vendors and problem solving. Also, if you have some specific questions, we'd love to be able to get enough together to put in a questions and answers column. We would ideally like to help each and every one of you, but can't if we don't know your needs. A sort of preview to all this follows in the first two of three tips I'm passing on this month.

**Tips:** Like most early Econolines, mine shifted poorly after 20-odd years of who-knows-how-many-shifts. I started looking for the why and how, and came to the bracket that's riveted inside the top of the shift column. This bracket holds the shaft that the ball at the end of the shift lever rides in. Both sides of the bracket were broken. Off to the junkyard I went (with Jay, of course). Pickings were skinny for Econoline brackets (doo-dads, whatever) that weren't in similar shape and a mid-year (1969-1974, or "short-nose") van nearby had the steering wheel pulled. By chance we took a look, and the equivalent part was intact, and of a stronger design than any we'd seen. Out came the hammer and chisel, and after narrowly avoiding the bracket as the second rivet came loose (it's got a spring under there that shoots it at you if you're in line) we compared it to the one that was broken, and sure enough, the part was the same in every way, except for the reinforcement. The column shifted beautifully when the "new" bracket was bolted (instead of rivets) in. Unfortunately, I tried at a later date to help a friend with a Dagenham 4-speed correct the same problem and the parts ARE NOT the same. We ended up brazing his.

The next tip is directed to 1964-1967 owners who are tired of not getting enough heat in winter and too much in summer due to an inoperative or partially clogged heater control valve. Most of the ones we find in junkyards, even in semi-sunny California, are shot. A useable substitute, usually found in good condition, is the same item from a 1957?- 1966? Ford pickup (non-Econoline type). The control valve is L-shaped, cable operated, and appears to not clog or rust over time.

Via Lee Brown, we've been informed that one way to slow the rapid (relatively) wear of Econoline steering boxes is to take the box apart, clean it out, and refill it using STP oil treatment. It's light enough to get back into places that grease won't when pushed out. He adds that the truck steers easier as well.

As a last note from me before we get into the rest of the newsletter, there is an update for the membership roster following the Econoline Classifieds. Please add this to your existing roster, or if you've joined since the last newsletter (and therefore received an intermediate roster), compare this update to the roster you received, and correct as needed.

Like what you've just read, the rest of the issue is kind of a melting pot. Something for everyone, hopefully. Jay and I (and others) have both done the dual master cylinder conversion that follows. We are finishing up the production figures series, and our first contributed article has to do with putting power windows in an Econoline. I'll probably give it a try in one of mine, it sounds straightfoward enough. Good luck, and I'll talk at you next time.

### **Dual Master Cylinder Conversion for 1961- 1966 Econoline**

The 1961-66 Econoline used a single master cylinder brake system. What this means is that if any part of the brake system fails, you will lose brakes at

all four wheels. Starting in 1967 Federal vehicle regulations required all vehicles manufactured in this country to have a dual master cylinder brake system. The 1967 Econoline van was the last year of the early mid-engine body style and was in most ways the same as the earlier vehicles so most parts, including the dual master cylinder will fit the earlier models. The dual system will give you a much safer vehicle for a minimum number of dollars and should be considered for all of the early vans.

The conversion consists of simply bolting in the master cylinder from a 1967 van and hooking up the lines with a few changes which will be detailed here.

The first step is to find a master cylinder. These are not available rebuilt so you will have to get either a new one (about \$120.00 locally) or find a used one in a wrecking yard. The rebuild kit is still available for these but be sure to get a master cylinder that is not heavily pitted since they cannot be honed beyond 0.003 inches oversize.

The 1967 unit is easily identified by the large rectangular filler cap and the larger access plate in the floor. Other differences are the location of the brake light switch and the addition of a warning light valve. The warning light was located above the headlight switch to show a loss of pressure in the brake system. Differences in the 1967 vans and pickups are: the 67's had backup lights, earlier ones did not, even as an option; the 67's had the emergency flasher switch incorporated into the turn signal switch, earlier ones were on the dash; the gearshift knob was also different in 1967.

Anyway, you should get the warning light and valve when you get the master cylinder and try to get the lines to the rear junction and left front as well since they are different from '61-'66. Alternatively, they can be made using precut and flared lines available at most parts houses. The original line to the right front can be used if it is in good shape.

To sum it up you will need: 1) the master cylinder, 2) brake light switch, 3) access cover for the hole in the floor, 4) pressure warning valve, 5) warning light on the dash, 6) steel lines to the rear and left front, 7) a rebuild kit for the master cylinder.

If you are buying a used master cylinder and they want to charge you extra for the pedal, leave it behind since the pedal is the same.

To install the master cylinder you should first cut the larger opening in the floor after the old one is removed. The front edge of the hole is in the right place so use the access plate as a guide to cut the opening. Be sure it is large enough to remove the master cylinder cover through but not so large that there is no bite for the cover plate screws. Now bolt the master cylinder and warning valve in. Refer to the diagram to hook up the brake lines. If you did not get the lines you will need two pieces of precut and flared steel tubing. These come in standard lengths and should not be cut or flared unless you have a double flaring tool. These need to be double flared to withstand brake system pressures. You will need a 40 inch piece of 3/16" line for the left front and a 60 inch piece of 1/4" line for the rear. Also get an adapter to step the 1/4" line to 3/16" to use at the junction point in the line to the rear.

There are two wires on the dash mounted warning lamp. One connects to the ACC post on the ignition switch, the other goes to the connection on the warning valve. The wires to the brake lamp switch will have to be spliced to the new wires, it does not matter which is which.

After everything is connected, fill and bleed the system. The front half of the master cylinder goes to the front brakes, the rear half to the rear. When you turn on the key the warning lamp will probably be on. To center the switch and turn the lamp off open one of the bleeder screws on either the

On the second line the first number is the wheelbase. All of the Econolines produced from 1961-67 had a 90 inch wheelbase so the number 90 or 090 will appear here. Note that the Falcon vans were not considered commercial vehicles so this space will be blank.

The color, model, and body type codes were covered in the previous two newsletters.

The transmission and axle codes are decoded in the tables below. Note that the codes listed in the shop manuals for some years were not updated so were not always correct. Be sure to determine the correct year before looking up the codes as they had a few changes from year to year.

The maximum GVW, certified net horsepower at ---- RPM spaces were used by individual states for commercial registration purposes. Again, note that these spaces were left blank on the Falcon vans.

The D30 space determines where the vehicle was originally ordered. See the June/July newsletter for D30 information.

#### ECONOLINE ENGINE CODES: 1961-1967

| <u>Engine Size</u> | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 |
|--------------------|------|------|------|------|------|------|------|
| 144                | S    | S    | S    | S    |      |      |      |
| 144*               |      | K    | K    |      |      |      |      |
| 170                |      | T    | T    | T    | T    | F    | F    |
| 170*               |      | M    |      |      |      |      |      |
| 200                |      |      |      |      | S    |      |      |
| 240                |      |      |      |      |      | J    | A A  |

\* Low compression export

#### ECONOLINE TRANSMISSION CODES: 1961-1967

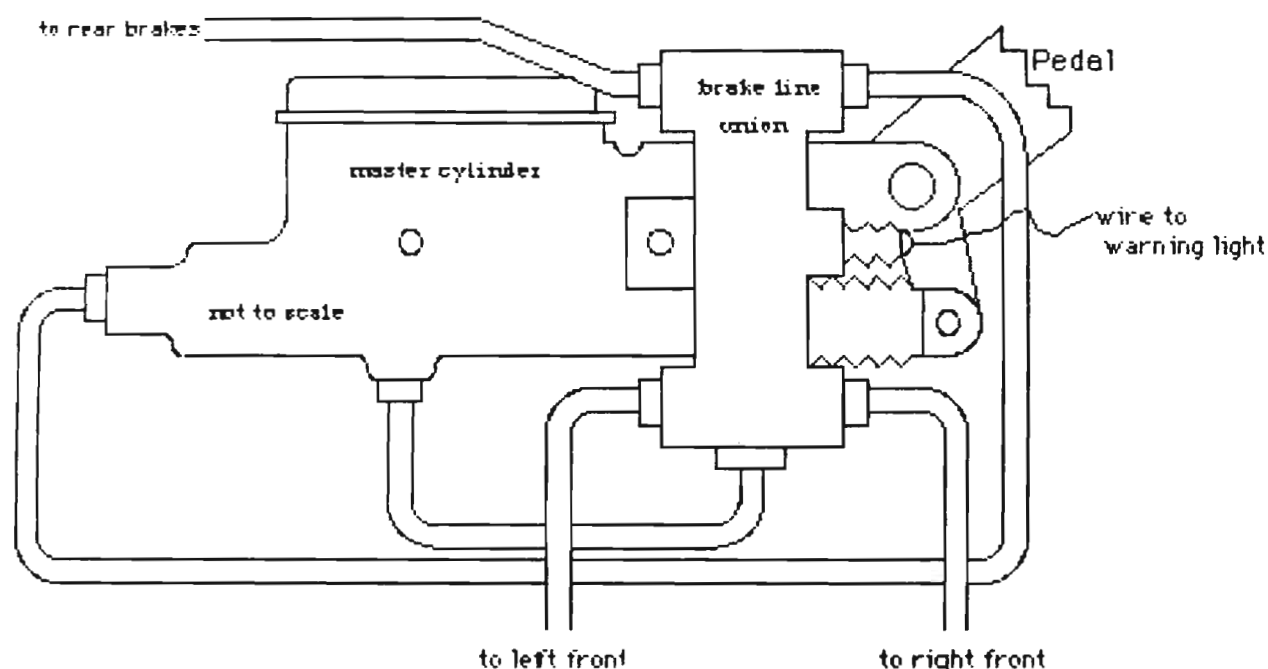
| <u>Transmission</u> | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 |
|---------------------|------|------|------|------|------|------|------|
| 3-speed std.        | A    | A*   | A    | A    | A    | C    | C    |
| 4-speed std.        |      |      | F    | F    |      |      |      |
| C4 automatic        |      |      |      | G**  | G    | G    | G    |

\* In late 1962 some vehicles carried trans code 2A which in late 1962 indicated the later fully synchronized transmission which was continued into 1963 and later years. In 1963 both "A" and "2A" appeared for some reason, possibly different ratios?

\*\* There is a reference in the Ford parts catalog which indicates that some 1964 Econolines may have been produced using the Falcon 2-speed automatic (Ford-o-Matic) although there is no mention of this in shop or owner's manuals.

front or the rear and slowly press the brake pedal. The lamp will go out when the switch is centered. If this doesn't work or if you go too far, try the opposite (rear or front) part of the system. It may take a few tries to get the switch centered. Close the bleeders and check the fluid level. Check all connections for leaks and check the operation of the brake lights. You should now have a safer and much improved brake system.

1967 Dual master cylinder brake line routing.



### Still More Production Information

In this issue I'll try to complete the series on decoding your data plate to tell you what you've got (or had) for an engine, transmission, and rear axle. In the past couple of issues we've covered serial numbers, paint and interior codes, district codes, model and body types, so we will "fill out" the rest of the data plate.

Beginning with the top line on the data plate, the serial or warranty number tells you several things. The letter "E" followed by the first two digits tells you that you have an Econoline vehicle and the first two of the three digits of the model series. For example, E10... would be either an E100, E102, E103 or E104 (see the first newsletter).

This is followed by two letters. The first tells you the size of the engine, the second tells you where the vehicle was built. In the case of the Econolines, all will have an "H" for the second letter since all were built at the Ford Truck plant in Lorain, Ohio. For the engine size, see the table below.

The six digit number, or letter and five digit number that follows is the consecutive unit number for all Ford trucks (not just Econolines) produced and will tell you the month and year that the vehicle was made (see the second newsletter).

## ECONOLINE REAR AXLE CODES: 1961-1967

| Ratio/Type | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 |
|------------|------|------|------|------|------|------|------|
| 3.50:1 LD  | 01   | 01   | 01   | 01   | 01   | 01   | 01   |
| 4.00:1 LD  | 02   | 02   | 02   | 02   | 02   | 02   | 02   |
| 4.11:1 HD  |      |      | 03   | 03   | 03   | 12   | 12   |

| Ratio/Type | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 |
|------------|------|------|------|------|------|------|------|
| 4.56:1 HD  |      |      | 04   | 04   | 04   | 13   | 13   |
| 3.00:1 HD  |      |      |      |      |      | 07   | 07   |
| 3.50:1 HD  |      |      |      |      |      | 11   | 11   |
| 3.00:1 HD* |      |      |      |      |      | A7   | A7   |
| 3.50:1 HD* |      |      |      |      |      | B1   | B1   |
| 4.11:1 HD* |      |      |      |      |      | B2   | B2   |
| 4.57:1 HD* |      |      |      |      |      | B3   | B3   |

\* Locking axle (Positraction or limited slip)

### Power Windows for early Econolines

This is a simple how-to. What you need are GM power window units from four door GM cars. Cadillac back doors are the best. These are simple, one-arm units. The switches are from any GM car.

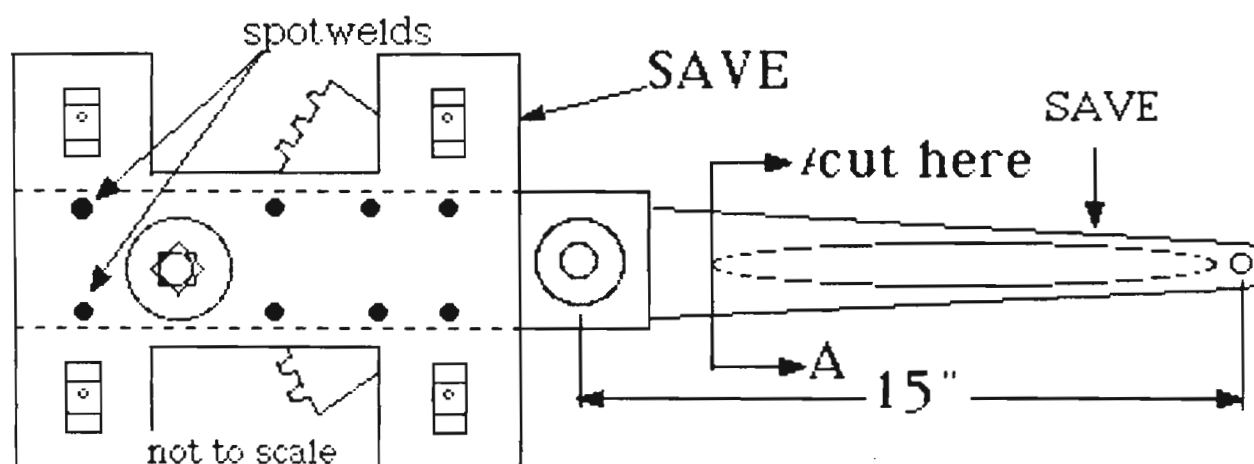


Figure 1: Ford manual window crank, bracket, and arm.

OK, now let's build a set. First remove the stock window regulator from the Econoline door. Drill out the spot welds that hold the unit on the bracket.

There's eight of them (see Fig. 1). You need to save the bracket for the proper pitch. Next cut the Econoline arm off at line A-A in figure 1. This arm (from the Econoline) will be welded onto the GM unit. Take the GM unit and trim part of the arm off (see fig 2).

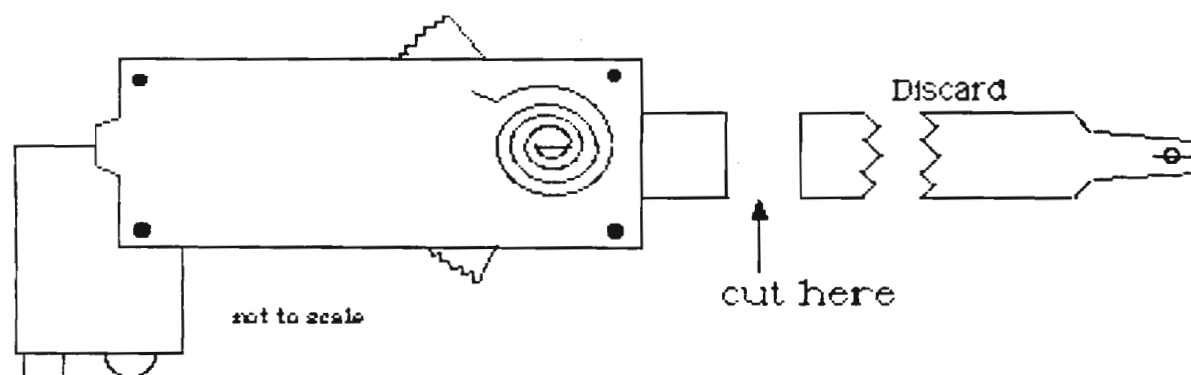


Figure 2: Power window unit with arm cut shown.

Now, position the GM motor unit on the Ford bracket so the motor part fits forward of the bracket and the unit's torsion spring is in the same area as the old Ford's was (see fig. 3). Weld the Ford bracket to the GM power window unit bracket, then weld the Ford arm onto the GM arm, positioning the roller pin center 15" from the torsion spring center, as in figure 3.

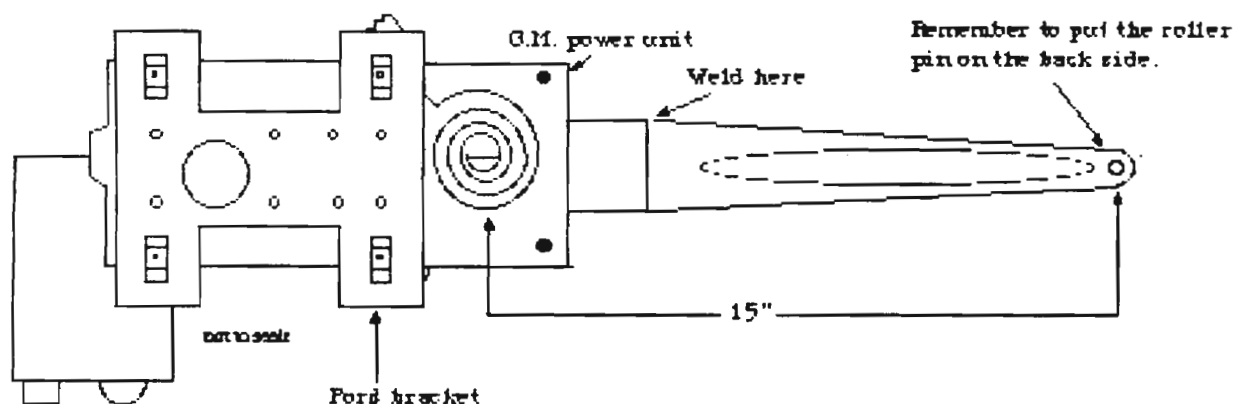


Figure 3: G.M. power window unit with Ford bracket and arm attached.

Ok, now it's time to install the wiring for the motors. The GM units are very simple to wire. Figure 4 is a basic wiring diagram. GM uses two different style switches. One has the trim plates molded in, one has trim plates that mount from behind. Both are good switches. Back to the wiring: 10 gauge is good to use because of the current needed to operate the windows. I run my wiring along the door stop strap. It may be necessary to ground the door to the truck body. Install the modified window units in the doors. You might have to put a piece of 1"x4"x4" in the bottom to act as a door stop. A friend of mine didn't and his setup still works fine. You be the judge. Test the windows and enjoy. Stay tuned next issue (the parts issue) for some sources for glass channel, etc. That ends the how-to article, so remember: ....if its got a hood, it ain't no good!

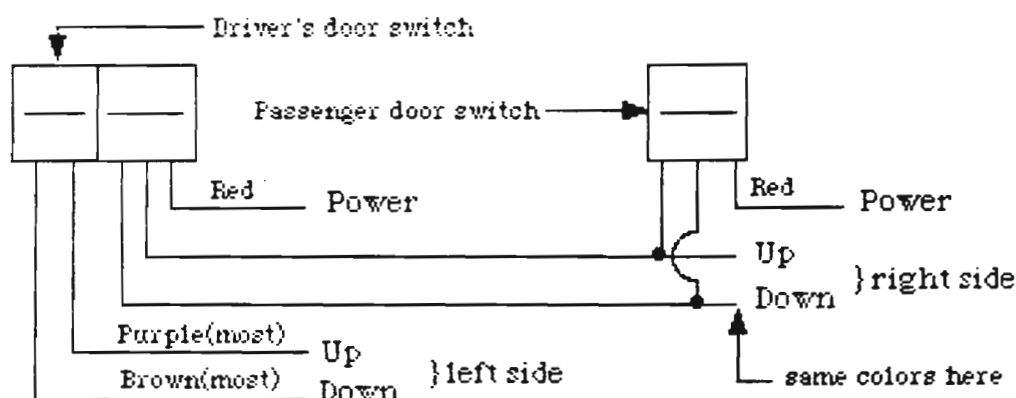


Figure 4: Wiring diagram for G.M. power windows.

Contributed by: Harold Mezo & Terry Wheeler, Orlando, FL (Thanks, guys).

Jay's comment:

When installing warning lamps in my doors I came up with a neat way to run wires into the front (or side/rear) doors which I thought I would pass on here. This would work well for wiring for the power windows as well as anything else in the doors which needs wiring: speakers, lamps, electric locks, etc. The wires are run inside a length of thinwall windshield washer hose which is fixed to the body and slides in a plastic bushing in the front surface of the door. The bushings I used are the type commonly used in electronic equipment, also known as "Heyco" bushings. If you need some, I can send you some at cost. The hose is fit through a rubber grommet where it goes through the door jamb and is clamped to the body behind the lip (the surface where the door strap is screwed down). A spring inside the door keeps tension in the hose to keep it from pinching in the door opening. To install, drill holes in the front edge of the door and the door frame. The hole in the door should fit the plastic bushing, the hole in the door frame outer layer should fit the grommet. The hole in the inner layer should fit the O.D. of the hose. Install the hose into the grommet and press in place, leaving enough length to clamp the hose down to the body. Slide the hose through the bushing into the door and clamp the spring to the hose. A small hose clamp works well here. Attach the other end of the spring to a convenient point (I used one of the holes for the door panel screws). Push the wires through and you're home free!

### **Econoline Classifieds**

#### **Wanted:**

Two left motor mount brackets, and one right motor mount bracket for 1961-1964 small six, manual transmission, carburetor for 200 cid engine. Wilson Mitchell, Route 2, Box 274, Louisiana, MO 63353

Econoline door seals, firewall liners, emergency brake handles, steering wheels, seat upholstery, armrests, tailshaft extension assembly from Dagenham 4-speed, extra rod for Dagenham 4-speed, floor heater decals; for

pickup: dome light covers, headliners, tailgate braces. Jack Baldwin. 3439 Powell Ave. Louisville, KY 40215

Pickup tailgate, fender skirts (as sold by J.C. Whitney or ???, ages ago). Ed Bucholz. R.R. 2, Box 61, Lake Village, IL 46349

Four good cargo mat retainers, \*C1UB-13102B, full headliner panels for deluxe club wagon (perforated), dark blue armrests for deluxe club wagon, heater, etc. decals, original blue fabrics(2) for deluxe club wagon. Don English. 301 Alameda Blvd., Coronado, CA 92118

Tinted windows (front door glass), blue padded dash and padded glove box door, info/ lit./pictures /parts relating to Mercury version of Econoline. Jay Long. 15039 Costela St., San Leandro, CA 94579

Tan padded dash and tan fiberglass dash skirt w/o cutout for padded glove box door, day/night rear view mirror, straight pickup tailgate, tinted glass package for 5-window pickup. Brian Cochrane. 258 Cambridge Ave., San Leandro, CA 94577

**Free:**

Will look for almost rust-free Southern California used parts (tailgates and turn signal lenses are too hard). Indicate desired condition and price. Don English. 301 Alameda Blvd., Coronado, CA 92118

**Parting out:**

1967 3-window pickup and 1964 Window van. Sorry no tailgates. SASE. R. Hart. P.O.Box 3043, Madison Heights, VA 24572

Roster Updates

**Corrections:**

Change Beth Greenbalgh's to Greenhalgh. She and Steve have a new address:  
21914 Entrada Road  
Topanga, CA 90290

Jane Pannell's new address is:  
15 Old Sable Road MHP  
Evington, VA 24550

**Add(since last newsletter):**

|   |   |   |
|---|---|---|
| Jack Baldwin<br>3439 Powell Ave.<br>Louisville, KY 40215                  | 1962 5-Window Pickup<br>1962 5-Window Pickup<br>5-Window Pickup | Rolled; for parts<br>144 cid, propane<br>4-speed column |
| Ed Buchlotz<br>R.R. 2, Box 61<br>Lake Village, IN 46349<br>(219) 992-3791 | 1967 3-Window Pickup<br>196? Deluxe Club Wagon                  | 6" top chop, ex-rail<br>road vehicle<br>For parts       |
| Jim Culver<br>14 Morgan Ave.<br>Glens Falls, NY 12801<br>(518) 798-8005   | 1965 Window Van, Extended                                       |   |

|  |  |  |
|--|--|--|
| Gerald Deemer<br>1606 Manor Drive<br>Kissimmee, FL 32741<br>(305) 846-1491 | 1965 Deluxe Falcon Club Wagon<br>1966 Falcon Club Wagon  | Heavily optioned   |
| Richard Charles Hart<br>P.O. Box 343<br>Madison Heights, VA 24572          | 1961 5-Window Pickup   | Starting<br>mechanical work  |
| Steve Jackson<br>302 Market St.<br>Lewisburg, OH 45338<br>(513) 962-4282   | 1967 Regular Van<br>1962 Falcon Window Van<br>1965 Regular Van   | Ex-Navy van<br>Daily driver<br>Heavy-duty,<br>parts van  |
| Marsden Manson<br>20605 Finnigen Hill Rd.<br>Hillsboro, OR 97123           | 1961 Window Van<br>1963 5-Window Pickup<br>1961 5-Window Pickup<br>1964 Regular Van<br>1964 Window Van<br>1965 Super Van | Owned since '61<br>Original cond.<br>Under restoration<br>To be restored<br>For parts<br>For parts |
| Ken Pearson<br>23730 S.W. Francis<br>Hillsboro, OR 97123<br>(503) 648-5572 | 1964 3-Window Pickup<br>1967 5-window Pickup   | Ex-military<br>For-parts   |