Brian Cochrane, 258 Cambridge Ave, San Leandro, CA 94577 (415) 568-6101
Jay Long, 15039 Costela Street, San Leandro, CA 94579 (415) 352-4367

**ECON**oline **O**rganization Newsletter
October/November 1988

We're back again. Seems like no matter when we start working on the next newsletter, it's never done until too late. I know, it keeps y'all on edge until it shows up in your box. Hopefully you appreciate the choice we make every time to put it out late and keep the quality as high as possible. We really do try to be more on time, but if you've ever been on this end of things in another organization, you know what we're up against.

I don't really have too much to say in this opening blurb, this time. Things have been pretty quiet on the Econ0 front. I do want to mention that two dates are being considered for another Econ0 gettogether west. They are April 15, 1989 or April 22, 1989. They are both Saturdays so folks can drive one day, meet that afternoon or evening, and drive home on Sunday. The decision as to which day will depend on input (amount and preference), Easter, and availability of the site. Once again, we will plan to have it in the Bay Area, by privilege of being the organizers. This event is being planned far enough in advance that everyone can make plans and schedule accordingly. Hopefully the weather will cooperate and be spring-like. More in the next issue.

Speaking of next issue...we're still in the scheming stage. We'll definitely finish the Econoline interchange series by offering up the ultimate "modified stock" Econoline, and I'm not talking about race cars. I'm sure Jay has a list of other technical items to include, but he hasn't clued me in yet. Whatever we do, we'll keep it to a single issue to a) get it out (more) on time, b) not spoil y'all, and c) gear up for the blow-out final issue, color xerox and all.

This issue is almost as good. We've put lots into it, because we owed you after being so late on the last one. Notice that we've started putting the initials of the author at the end of each article. When we started, you could tell who wrote what, but things are getting less distinct. Now you know exactly who to cuss. Tips have the usual quick and dirty modifications, maintainence, and common sense ideas. Jay continues the Econoline parts interchange series. Marsden Madson just had to answer Tony Smith's question from the last issue as to what kind of person drives an Econoline and tells us about one of his many Econolines in the process. Jay reviews the new product on the Econoline market: Dennis Carpenter's vent window seals and tells us how to install them the easier way. I trekked to Carlisle '88 and felt that an opinion may be of interest to some of you. Jay helped a newer member, Eric Thompson, install a 250 Ford six and automatic transmission into Eric's 1962 Falcon van and relates how that job was done. Like any swap process, refinements come with experience. This was the first swap of a 250 that we've seen or done, and have found that the method used represents a way of doing the swap, but not necessarily the best way. The disclaimer at the beginning of the article is for those of you that

may be considering such a swap (ie: be sure to read the whole article). Lastly, we are catching up on members that have joined since the last roster was sent out. Some are familiar names from last year that have been late rejoining, many are new.

That's all from me. Have a good turkey day and may Santa bring you the Econoline goodie you've always wished for. Happy holidays. Enjoy. BC

## Tips

1) Waterproofing the doors. Originally, the Econolines had water shields on the inside of the doors, behind the door panels. These are seldom seen, but are useful. The seals were made from what looked like tar paper and kept water from getting in around the armrests and at the lower edge of the door panel. Remember, there is nothing to keep water from getting into the door through the window felts. A new seal can be made, either from tar paper or plastic sheet (such as heavy tarp material). The upper edge should be glued to the metal surface between the door panel and the door. The lower edge should be inside the lower lip of the access hole.

While you're inside the door, check to make sure the drain holes are clear. These are at the lower edge of the door outside the weatherstrip. There are three holes. There are also a series of drain holes in the lower side body panels on the inner edge. Those of you back east have my sympathy--my van was from Ohio and the drain holes made way for the rust holes they are supposed to prevent. Anyway, making sure the drain holes are clear will go a long way toward preserving the body from rust. Another area to check is the sealer around the front door hinges. If this sealer is cracked or missing, as this often the case when the door has been readjusted or changed, water will get down in there and cause the front footwell area to rust out. This is a blind passage-- there are no drain holes anywhere so the water has nowhere to go (drilling a couple of drain holes isn't a bad idea either). Same goes for the side and rear doors also, though these are not as much of a problem. While you're under there cleaning, take a look at the rear corners, below the taillights. You'd be amazed at how much mud and crud can accumulate there in 25 years. Don't scrape too hard or the metal will come away with the crud. JL

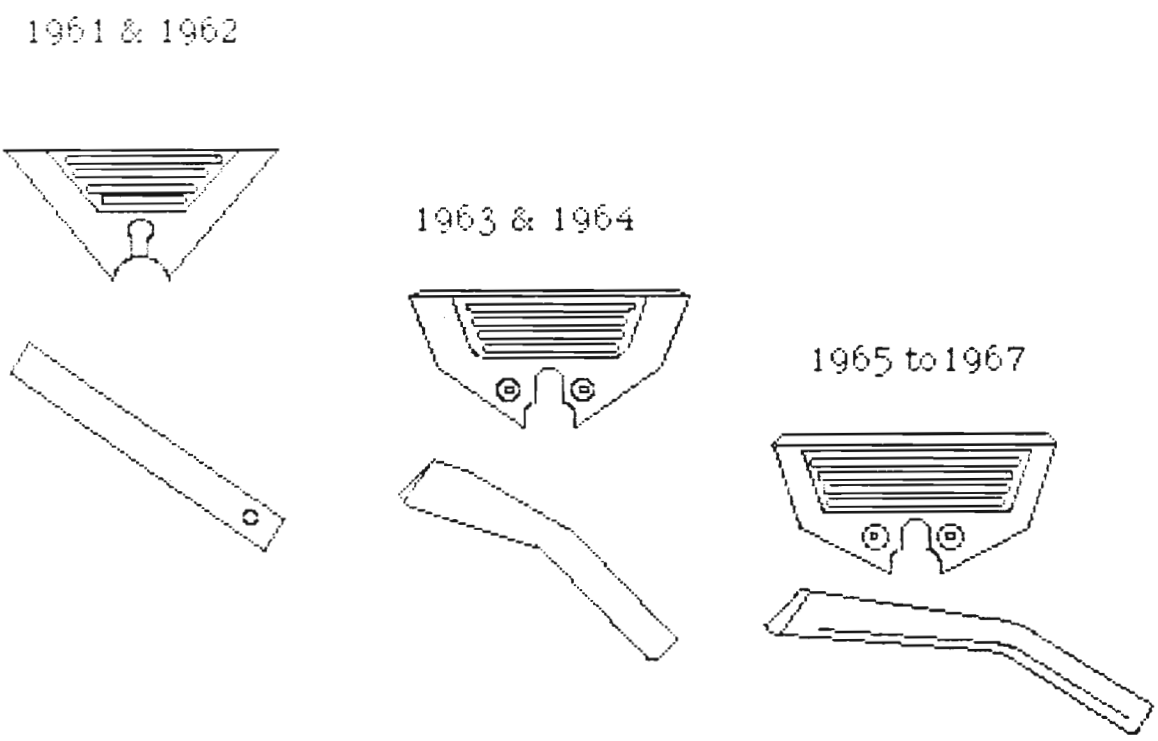
2) If you have a 1965 to 1967 truck and your heater motor dies, don't despair. The same motor was used in the Ford trucks from 1967 to 1972 (much more common). I was quoted as high as 50 bucks for the Econoline motor, but being a cheapskate looked through other Fords and came up with the truck one. The heater body is the same also, but on trucks you had to reach under the dash and flip the lever controls for the defroster instead of having a remote cable, hence the "ON-DEF-OFF" markings molded into the heater. JL

3) If you have an early van (pre-'65) or a pickup with the stock rear bumper, your license plate lamps are probably either broken, corroded, or missing. Good news-- these are a common aftermarket part and are available at most auto parts stores. NAPA stores have them as do many others. Some of these press in and some are held by a nut from behind. Look also on Ford wagons in the junkyards as many of these will fit as well. There are some differences in appearences so pick the ones you like best. The NAPA ones will also fit the 1965-'67 vans with the door mounted lamp if you remove the stock socket and press the new one in. The hole size is the same. For pickups without a rear bumper or a work bumper, look on full size Fords and Mercurys from the early -mid '60's. These were held on with two screws and had a glass lens. Note that many pickups came without a rear bumper although all vans had one. JL

## More Intra-Econoline Parts Interchange

More bits and pieces this time, leading to a summary of the "Ideal Econoline" (if there is such a thing) in our next installment. Some of these things have been mentioned in previous tips, articles or notes, but here it is, all in one place.

Before I get too far, here's a drawing to clarify the differences in steering column design that were in the Econolines. I talked about this last time in this article and have mentioned it before that. So no one goes on confused, here it is in black and white.




Okay, now how about backup lights to begin with? The only Econolines to come with backup lights originally were the 1967's. The short vans and pickups had them just above the rear bumper on both sides. The long vans had them as part of the taillamp assembly. The short van and pickup lamps consisted of chrome plated pot metal bezels, a socket insert, and a clear pointed lens. The bezels are different slightly left and right and are very prone to pitting and corrosion. The lenses are vulnerable since they stick out almost even with the bumper and they rot from the sun. The socket and lens were aftermarket items that Ford used as a temporary solution until the new style vans came out in mid-1968. The socket and lens , being standard aftermarket parts, were found on other vehicles as well. The early 1960's Jeep Wagoneer and CJ5 had the same socket and lenses. The 1959-'61 Rambler American used a similar lens on the front turn signals! The socket is the same, but the lens is slightly different. It is still the same size and shape, though. I was told that the socket and lens can still be bought at lighting shops (such as those that cater to big trucks and RV's) as well. Unfortunately, the bezels are Econoline only and good ones are hard to find.

The backup light switch was located in one of two places. On the standard transmission models, it was mounted to the bottom side of the steering column

support plate. A tab, attached to the shift tube, activated the switch when the truck was shifted into reverse. On the automatics, the switch was mounted on the transmission. When installing backup lamps on an earlier van, these switches can be used. The standard transmission one will fit vans back to 1963 (or a '61-'62 with a later column). The automatic version will fit any C4. Conversely, any C4 neutral start/backup switch will fit the Econoline C4. The only difference seems to be the length of the wires and their connectors.

To put backup lamps on the 1965-'66 Supervans, all you need to do is to find the sockets and lenses from a 1967 Supervan, a 1968-'74 Econoline, or a 1967-'72 F100 pickup. These will bolt in directly. The only other thing you have to do is install the switch and wiring.

When installing the wiring, come off the "ACC" terminal on the ignition switch, through a 14 amp fuse, to the switch. The other switch terminal goes to the lamps. Use 16 gauge wire and make sure it is not rubbing or being pinched against the body of the truck.

Some small items that are often broken or worn out are the dash knobs. These originally had a white pressed in center. The center is usually broken or missing. Often, the knobs have been destroyed from the sun or someone trying to pry them off. There were two types of knobs used that have the same appearance and can be interchanged to replace the trashed ones. The early (1961-'64) knobs used on the floor heater and the wiper switch were held on with a set screw. The later (1965-'67) knobs were used on the wiper switch and defroster control and were held on with a spring clip. To remove these, use a small flat screwdriver. Pull against the clip through the slot at the base of the knob. With the clip released, the knob should slide off easily. I prefer the early set screw knobs since they are held on more positively. The set screw knobs can be used to repair the 1961-'65 choke or '65-'67 temperature and heater controls as well. The knobs on these were pressed onto a knurled shaft and often pull off, especially if the choke cable gets sticky. Note that the choke knob was changed in 1966 and is shaped differently.

Got a bad knob with a good insert? Don't despair. Usually it's the other way around. Besides, the inserts can be removed by soaking the knob in hot water for a few minutes and tapping the side of the knob. The insert will come flying out. Keep your eye on it as it wants to get lost.

If you want a stock radio there was one available as an option. The were actually two versions available. The early ones had only volume and tuning controls and the dial markings were "5.5-6-7-8-10-12-15-16". The later ones had a tone control and the dial was marked "5.5-6-7-9-11-13-15-16". The other difference is that the early one was half tube and half solid state while the later ones were all solid state. (Note that the Ford literature called them all solid state!) If you have three strange holes in the center of your dash, this is where the radio was. There was no large cutout like most car radios use. The dial was a remote indicator and removed from the front while the radio itself removed from behind the dash. The right hole was for the tuning shaft, the left hole for the volume, and the center one was for the dial light. The same radio was also used in the F100 from 1963-1966 so look here also. The dial face is usually pitted so if you see a good one, grab it. If not for you, then for one of the rest of us. Early Dodge vans had a very similar looking radio that should look stock. The face is a little squarer than the Ford ones. The stock antenna mounted at the right side below the windshield. It had a black rubber base. The antenna from late model Dodge and Volkswagen(!) vans is the closest modern equivalent if you can't find the original.

A worthwhile interchange was the change in the vent window locks that occurred in 1964. The 1961-'63 locks did not have pushbutton latches, which means

that the truck is easy to break into through the vent window. In 1964 a pushbutton was added (which means that whoever wants in just breaks the window--I've changed mine twice). The entire frame must be changed since the post is different also. This is a bolt in and now's a good time to replace the worn out seals also. See my review of Dennis Carpenter's new repro vent window seals for info on how to do the change.

All of the glass is interchangeable between all years and types of 1961-'67 Econolines. There were some differences, but all are a matter of preference. The 1961-'63 glass has a Ford script logo. The 1963 and later say "Carlite". Aftermarket replacements have still other inscriptions. A tinted windshield was available in the Econoline from the beginning in 1961. These were either a straight tint or tinted with a blue sun band across the top edge. The aftermarket windshields also came with and without the blue stripe. Starting in 1966, full tinted glass was available in the pickups and window vans. This option seems to be quite rare. I'm still looking for the front door glass for my van.

A subtle change involves the different gearshift levers that were available. The 1961-'64 ones were "straight"-- that is they only had one bend near the column and came straight out from there. The mid 1964 and later gearshift levers were "bent"-- they had two bends, presumably to clear the knees of tall drivers. The knob ended up in pretty much the same place. Note that all of the automatics had the bent lever, which was shorter than the standard transmission version and had a tab for the interlock for park. Around mid 1965, they went to a hardened lever. I have seen some pretty contorted levers in '64-'65 vans and also some pretty broken ones. It's not too hard to imagine someone getting mad at the shifter and doing this.

The knob was the same from 1961-1966, unless you're lucky enough to have one of the original 4-speed knobs. These had the shift pattern embossed on a flattened top surface. The 4-speed lever was the same as the three speeds (both straight and bent 4-speed rods were available). In 1967 the knob was changed to a smooth flared shape with no knurling. The 1967 style lever and knob was carried over into the 1969-1974 vans. These vans also came with chrome levers as an option, either with a black plastic or chrome knob on both stick and automatics. To use the 1969-'74 automatic rod on the 1964-66 column, you must grind the side of the interlock tab to match the early one. The standard transmission lever from these years fits the early trucks with no modification.

Another item to interchange is the automatic transmission shift indicator. The 1964-'66 Econolines came with the "green dot" transmissions. These went P-R-N-D(white)-D(green)-L. These are NOT the two speed transmissions that many assume they are, but are the C4 as used in millions of Fords for years. Normal driving was done in the green dot position. The white dot position gave a second geer start for driving in mud or snow. The indicator for these are fragile and are often broken or missing. The 1967 Econolines came with the more normal P-R-N-D-2-1 pattern. The only internal difference in the transmision was in the valve body assembly and these can supposedly be interchanged either way. The shift indicator for the 1967's would seem to be a rare item, but the same piece was used on the 1969 -'74 Econolines. These are plentiful in the junkyards and should be easy to find.

An interchange from the later vans (still an intra-Econoline) is the brake warning indicator for the 1967 Econolines. Remember that the 1967's had the dual master cylinder. A part of this system was the differential pressure valve. The purpose of this valve was to go off center if you lost pressure in half the brake system and light an indicator to tell you to check the brake system. My experience with these valves is that they are usually stuck solid with the lamp permanently off

or permanently on. In the latter case, the wire is usually pulled loose at the valve so the driver doesn't have a red brake warning burned into the left eyeball. On the 1967 Econoline this light was located above the headlight switch, just below the edge of the dash pad (the pad was standard by then, unless deleted by special order). The good news here is that this warning lamp was continued into the 1969-'74 vans, and also the 1967-'72 F100 pickups.

A few mechanical items are in the lineup. Front axles are the same from 1961 to 1967. There are two types of spindles , however. From 1961 to 1963 the spindles used a doughnut type grease seal at each end of the kingpin. The grease fittings were threaded into the front surface of the spindle; one at the bottom and one at the top. The 1964-'67 Spindles had screw-on caps at the top and bottom with the grease fittings threaded into the caps. These had a more positive seal to keep grease in and dirt out. The kingpins themselves were different also. The early ones had a groove at each end that the seals pressed into . The later ones were shorter and had straight ends.

Starting in 1964, self-adjusting brakes were on all models. These are a bolt-on for the earlier trucks. Most auto parts stores sell a conversion kit which is nothing more than a complete adjuster kit. Ask for the adjuster kit for a 1964-'67 Econoline. The front brake shoes, drums, backing plates, and wheel cylinders are all the same from 1961 through 1967, including Heavy Duty.

A small but useful item is the master cylinder cap for the 1961-'66 trucks. This was a screw on metal cap with a hex fitting to remove it. These are often stripped or rusted in place, and are usually a pain to take off. Many rebuilt master cylinders come with a plastic cap with tabs to remove it by hand. Look for one in the junkyard next time you're there.

For more get-out-of-my-way decibels consider the dual horn option. The trucks with these had the second horn mounted outside the frame on the right side (behind the right turn signal). The early ones (1961-'65) were the metal type and were louder than the later ones that were plastic. The first horn is the same on both single and dual systems so if you have the stock single horn you don't have to buy both.A tip: if the full horn ring (or remnants thereof) is on the steering wheel, then the dual horns are usually under the front. JL

## What kind of a person?

by Mersden Manson

What kind of a person drives an old Econoline?? My wife, that's who!!

Our first Econoline was one purchased in 1961 after seeing a Thames van. We found a used Econoline with 9000 miles on the clock. It was a red and white station bus with no seats other than the two up front. It has become her giant purse. Where she goes -- it goes. She won't willingly drive anything else. Her ultimatum to me is "Keep it running 'till it dies or I do".

To that end, I bought a parts van, then another, then a pickup, then another parts van (for it's 4-speed), then a beautiful, original pickup for me to drive, and, oh yes, another pickup (ex-air force) since restored and sold.

Back to her "van". The original 144 got so tired after 130K so I installed a fresh 170 two years ago. Total mileage is now 144K. Not too much, but then it has a long way to go. It has suffered a few indignities, the worst of which was an engine fire that did a lot of damage to the seats, windows, headlining, plastic trim, dash knobs,

etc.. The engine was undamaged except for wiring and lasted until two years ago. Following the insurance settlement after the fire, I restored it to it's original glory. The body is now a little shabby and is in line for body work and a paint job. I'm glad to hear that Dennis Carpenter will be supplying parts for these tributes to Ford.

While I think I know a little about old Econolines, I'm amazed at the knowledge Jay and Brien have amassed. The information in the newsletter is very helpful.

P.S. Anyone want a 144 motor to restore?? MM

## Product Review and How-to: Vent Window Seals from Dennis Carpenter

First of all, I'd like to say "Three cheers for Dennis Carpenter". Cheer #1 is for listening to all us poor Econoline owners and looking into making repro parts. Cheer #2 is for testing the water by making the vent seals available. He is not the first to consider making repro parts, but as far as I know is the first to actually stick his neck out and make a "major" part available. By a major part, I mean one that entails considerable effort and expense to produce. We have seen Econoline gloveboxes, and parts that are shared with other vehicles, but these are the first exclusively Econoline parts available. Cheer #3 is for making good quality stuff that fits right. I was happy when I heard that he was the person that would be making the Econoline parts, since he has a good reputation for his F100 and early Ford stuff. The vent window seals are no exception. They fit right and seem to be as good as the originals. Dennis actually bought a rusty parts van to try the parts on before putting them on the market. I had no problems installing them other than two tired thumbs. Cheer #4 goes to Don English for providing Dennis with a NOS set of seals to use as a pattern, for keeping after Dennis by phone, and for bribing him with a sandwich at Carlisle '87. It must have been the sandwich that finally got him going (I think it was knockwurst). Anyway, Don gets a big share of the credit here also. See the hints below for a few installation tips.

The only significant difference between Dennis' seals and the originals is that the new seals do not have the brass eyelet in the hole for the screw at the lower edge. This eyelet prevents the screw from going through the seal and allows it to hold the lower corner of the seal in place. I would recommend that the lower edge of the seal be glued in the channel with contact cement since the screw goes right through the seal without the eyelet. The screw should still be installed to hold the channel to the door.

Installing vent window gaskets.

To install the early Econoline vent window gaskets correctly and painlessly, there are a few tricks that make things a bit easier. The vent window and frame must be removed to change the seal. To do this, first put a layer or two of masking tape on the door around the vent window, inside and out, to protect the paint. Remove the two screws at the front edge of the door that go from the door to the went window frame. Remove the screw that goes through the seal and frame and into the division bar at the lower edge of the seal. It may be hidden, but is reached through the hole in the seal. Also remove the two small screws that hold the hinge piece to the window frame. These are reached from inside by opening the window 90 degrees. Remove the hinge piece and store it and the screws in a safe place. With the window still open, carefully pry the upper edge of the channel out of the door, toward the outside. Once the channel is out, rotate the window to the almost closed position. This must be done since there is a point on one of the thrust washers on the shaft, and it will not come out if the window is in the open position. The window and frame should now lift out easily.

With the window out, the next step is to disassemble the hardware on the shaft. If it is rusty, apply a bit of penetrating oil first. Remove the nut, spring, and end the lower metal and plastic washers. The shaft will slide out now if you are lucky. You may have to persuade the shaft out of the upper washer by tapping it out. Note that both the metal washers are indexed to the shaft and will only fit one way. Remove the upper washer from the shaft and pull the window and shaft from the frame. Remove the old seal from the frame if it hasn't crumbled to pieces already.

Start installing the new seal at the ends after cleaning the frame. A bit of rubber lubricant helps but it also makes your hands slippery. Work toward the center by pressing the seal into the channel. It takes a bit of persistence, but you'll get there. (I have absolutely no patience, but gobs of persistence, the difference being that I'll do it wrong a dozen times rather than thinking it through and doing it right the first time). If you start in the center and work to the ends you'll stretch the seal and it will be half an inch too long at each end. This is not a real problem , since the original Ford seals do the same thing, but if you work in from the ends, it will fall into place nicely by the time you reach the corner. Make sure all the holes line up as you go. Install the window and hardware in reverse order and tighten the adjusting nut until the window feels right. For you perfectionists, the window should require 9 (nine) pounds of pull at the rear edge to start it moving. For the rest of us, make it feel right. It's a lot easier to adjust now, out of the truck, but you can reach the adjusting nut from inside the door if you need to later.

Reinstall the window and frame in the door, remembering to put the window in the closed position first. Make sure the seal lip is not caught between the frame and the door. Reinstall all the screws and hinge. The two screws at the front edge should be tightened last as these allow some adjustment of the window and frame. Carefully open and shut the window to make sure nothing is too tight and that the seal is seated completely in the frame. A bit of rubber lube helps here also. Use the window gently until the seal has time to seat. Keep it lubed and it should last quite a few years. Please DO NOT use an upholstery treatment such as Armorall since many of these products will cause rubber to prematurely age and rot. Enjoy! JL

## Fall Carlisle '88, An Evaluation

Having been to many local swap meets in my short time as a car nut, I decided that a Californian's opinion and evaluation of one of the largest swap meets in the country would be of interest. To east coast auto enthusiasts, Carlisle is a way of life, something to be taken for granted year after year. It's part of the ritual that concludes the summer: go to Carlisle, go to Hershey. To west coasters, Carlisle is "the grandaddy". It's like some big shrine of all swap meets. I had to know which it was, so I went.

I made it. I survived Fall Carlisle '88. No, I didn't drive my Econoline. The Galaxie is much nicer (at this point in time), quieter ('though Dennis is helping the van get quieter), and more powerful (but not much). Perhaps next trip. Yes, I got Bill Hossfield's booth space number wrong in the last newsletter. That's what I get for trying to shoot from the hip. Turns out he was two spaces over. My sincere apologies to those who may have tried to find us on Friday afternoon. We didn't see any wandering lost souls with "Econoline" written all over them, so assumed the short-notice get-together was a bust. It was kind of a last minute attempt anyway. My legs ached. They didn't know whether they were coming or going, what with sitting 5 days, walking 1 and a half, recovering for 3, and sitting another 5 on the drive home.

All in all, the meet was a lot of fun. For starters, it is big. But does big make it better? Yes and no. By sheer force of number of vendors, odds are that you will find something for every make of car produced. Whether or not it is a part you need or are looking for is another matter. I was looking for some very general stuff; stuff that I would expect to find at an average northern California meet. Shop manuals, wiring diagrams, owner's manuals for Galaxie, T-Bird, and Econoline were plentiful. Things like switches, horns buttons, and turnsignal lenses for Econolines were fairly common, about like a California meet. Real goodies? Few. I found only one item that I would call a goodie: a chrome, round head side view mirror. Every now and then I stumble on an equivalent goodie here, but it takes all summer of traipsing to swap meets. On a single swap meet basis, I would say that I did well in terms of how much I bought, and the amount of stuff I found. On a vendor basis, I would have to say that I did no better than I would do in California after seeing the same number of different vendors over the course of a summer.

Some things I liked about the meet in general was the relatively high proportion of auto related vendors. I know, it's a car parts swap meet. Try to tell that to the little old ladies selling doll clothes and one bumper so they can say they are selling car parts. Unfortunately, those types do appear at swap meets and in my opinion have no place there. I was afraid that Carlisle would have the usual 5% or so selling non-auto stuff and hence have about 400 vendors worth of junk. Bravo! I'd say I saw less than 1% junk. Speaking of proportions, I'd say that the meet had about 50 % of folks selling "stuff" (my favorite), 30 % vendors of reproduction, NOS, or new parts, and the remaining 20% related auto, auto memorabilia, food , buttons, etc.. The amount of folks selling "stuff" was pretty high, considering the cost and size of a space, the time required to sell at the meet, and the number of spaces available at the last minute (zip). I figured the professional vendors would buy up a lot more of the space. Meet layout was good. I've seen worse. Spaces were well labeled and it was fairly easy to figure out where you were at all times, and how to get from where you were to where you wanted to be.

Dislikes focus down to admission and prices. Admission is a nasty topic. Bill Hossfield tells me that admission charges to buyers is the norm for the east coast. Out here it is the exception, and is being bitterly debated among the professional swappers and the sponsoring clubs. The argument that a fee to buyers gets only the serious buyers is BS. I noticed that the dealers did most of their buying Wednesday night, the serious buyers bought on Thursday, Friday started to be lots more looking. I suspect Saturday was all lookers and slow walkers and Sunday was pretty dead from a buying selling standpoint, but still just as much gate money. I realize that the Flea Marketeers have only so many days to make their money and have their own expenses, but come on, I go to a swap meet to get bargains. An entry fee , plus lady friend, plus program to find my way, plus expensive food, plus charge on the cash advance service makes for an expensive day. OK once in while, but not on a regular basis. Not to mention what the Flea Marketeers are getting from vendors, advertisers, etc. I think I prefer the free system better.

Prices of items at Carlisle ran a touch on the high side, I thought. For what reason, I don't know. I do know that the meet has a reputation for that, and perhaps this, plus that many vendors are there to make a buck versus get rid of stuff (like at smaller meets) contributed to the higher prices. Nobody was way out of line on the stuff I bought, and I didn't not buy something because of price, but I only got a real deal from a few people.

Yes, I'd go again, vacation schedule and money allowing. By all means, if you haven't been to Carlisle, do go. If you are used to smaller meets, this isn't the swappers Mecca that you've been seeking. On the other hand, you'll probably find

something you can use. If you haven't been to any swap meets, this isn't the place to start. You'll be overwhelmed. Start smaller and work into it. In a word, it's: **BIG**.

BC

## 250 Swap for 1961-1964 Econolines

This article will describe how a 250/automatic was installed in member Eric Thompson's 1962 van. The stock motor mount arms were used, but we do not recommend them since we feel they are not strong enough to stand up to the much greater torque of the 250 motor. Eric plans to install the crossmember from a 1965-'67 van at a later date ( Don't you, Eric!) and we'll update you on the how-to when that happens.

Although the 250 Ford motor is basically the same block as the 144/170/200 six, there are quite a few differences that affect the installation of a 250 where one of the smaller motors was originally. I will describe the differences and what we had to change to get things to work.

The most apparent difference between the 250 and the smaller motors is that the 250 uses the larger six-bolt bellhousing and flywheel. There are two sizes of the six-bolt bellhousing and flywheel. The 250 we used had the small version. The 240 six uses the larger one. The 289/302 V8 comes both ways. The mounting bolt pattern is the same for both, but the flywheel diameter and starter location are different. Also, make sure to use the six cylinder flywheel, not the V8 one as they are balanced differently. Also, note that some of the later 200 motors were drilled and tapped for two bellhousing sizes, but neither set of holes is the same as the 250. The starter can be from the 240 automatic, 250 stick or automatic, V8 automatic, or V8 small flywheel stick. The best bet is to get the flywheel, bellhousing, starter, and torque converter from the same vehicle, preferably when you get the motor. Even better, get a motor and transmission together and swap on the Econoline tailhousing and tailshaft.

The transmission tailhousing mount we used was from a 1964 Econoline C4. This was a one year only unit. It has the single bolt mounting that is needed to bolt into the stock hanger on a 1961 to 1964 E100. The bellhousing and torque converter were from a 250 version of the C4. The case and innards of most C4's were basically the same. The transmission we used came out of a Maverick. Putting the Econoline tailshaft and tailhousing on turned out to be more of a job than we expected. The Econoline tailhousing and tailshaft came right off, as did the Maverick tailhousing. However, the Maverick (and other passenger car versions) tailshaft is held in by a snap ring deep inside the transmission. The Econoline tailshaft is held in only by the tailhousing. What this means is that you have to completely disassemble the passenger car transmission from the FRONT by removing the front pump and all the guts, until you can get to the snap ring. I was hesitant until we went to the junkyard (I won't tell you which one) and disassembled a transmission that was lying on the ground to see what made it tick. After that it was a piece of cake. The only special tool we needed was an inch-pound torque wrench to adjust the bands. With the front part back together, we slid in the Econoline tailshaft. An important difference between the Econoline and Maverick transmissions was the location of the vent. The Econoline C4 has a vent tube in the side of the case. The Maverick's is in the tailhousing. We installed a vent in the Econoline tailhousing after trying to fill the transmission and having gallons of fluid ooze all over the place. Look on older transmissions in wrecking yards for these check-valve assemblies threaded into the transmission case. We bolted on the now vented tailhousing and installed the driveshaft yoke. We used the yoke from a 240 since these use a larger U-joint. The yokes interchange between all Econoline transmissions, both automatic and stick (except 4-speed!), from 1963 to 1967(and possibly later). The 170's all have the small

front U-joint, the 240's have the large one. With the large front yoke and the heavy duty rear axle the 240 automatic driveshaft is a bolt in. We didn't happen to have one of those lieing around, so we ended up using one from a PTO (power take off) unit off a dump truck. You take what you can get. We had this shortened a bit and all was well.

With the transmission fit to the motor, the next step was to mount it all to the frame. The 250 has pads for the same motor mounts that the 144/170 uses. No sweat. We bolted the stock mounts to the block and lifted the engine in (by hand, of course). What they didn't tell us was that the 250 is wider. Not a lot, one hole width on the mount arms to be exact (1-1/8"). You can't just re-drill the arms since that would put the outer hole right at the edge of the cup that is spot welded onto the the underside of the arm. What we did was to remove the engine ("ugh", was the operative phrase) and take the mount arms out of the truck. We drilled out the spot welds and removed the cups. We re-welded these back to the arms 9/16" out from where they were (half of 1-1/8"), drilled the arms to match the cups, and put the arms back in. We also reinforced the mounts when they were out by drilling to put bolts lengthwise through the mounts in case the rubber separated. In went the engine again ("OOMPH"), and this time it fit. We bolted on the transmission, put a jack under it, and aimed at the mount. Almost made it, but not quite. Out came the Sawzall and before long the front edge of the emergency brake pivot bracket was trimmed so that the tailshaft didn't hit it. The 1964 Econolines already have this done at the factory. Now the big stuff was in place

Now it was time to mount all the goodies to the engine. The first thing was the generator. The pads were there and in the right place, but there is also a third pad above which is right where the generator is supposed to be. This sticks out about an inch from the block and was used to mount the 250 alternator. Unfortunately the generator will not work with this pad here. Neither will the 250 alternator bracket, because the floor is in the way. The Sawzall made quick work of the pad; we sawed it off flush with the block. Note that the 250 does not have the extra pad on the front cover that the 1965 and later 170, and all 200's do for mounting an alternator. To mount an alternator to the 250 you will need the alternator bracket off a 1964 170 (rare, since most '64's had a generator) or to weld a piece of bar to the later 170/200 bracket and drill to bolt to the 250. With the extra pad gone, the original generator bolted up with no problems, as will the 170/200 alternator (with modified bracket).

Next was the cooling system. The 250 has a longer water pump than the 144/170/200. This means that the stock 170 radiator will not fit. It probably isn't big enough anyway. What we did was to use the radiator from the 240. This one has a mounting flange that has about an extra inch of spacing built in. The radiator mounting bracket must also be from the 240 as it is taller. To get the radiator to fit under the original, short engine box (1961-1964) it was necessary to re-drill the mounting bracket to lower the radiator and bracket 1-1/2 inches. We used a 1965-'67 240 bellypan which has the dip for the bigger radiator, but we still had to cut and bend the center to clear the bottom of the radiator. The lower outlet was on the wrong side, so we used a long flex hose to go under and across. A better solution would have been to move the lower radiator outlet to the other side, but at the time the idea was to get it together and running and our local radiator shops generally are not open at 9:30 pm on Sunday evening. We used the fan and spacer from the 240 also. The 250 has a larger pilot diameter for the fan spacer, so we had to bore out the 240 spacer to fit the 250 water pump. Fortunately, the water pump on the motor we had was drilled and tapped with two bolt patterns since the 240 uses a smaller bolt circle then this 250 did. I don't know if they're all that way, so be careful here.

The next step was the steering column and throttle linkage. The column we used was from a 1965 Econoline automatic. This is practically a force fit in the 1961 to 1964 vans since the angle of the steering column was changed slightly in 1965. It

worked in a pinch, but the better choice is the 1964 automatic column (see Brian's neat drawings for column bracket identification). The Maverick had the later shift pattern so we used the gear indicator plate from a 1967 (also 1969-'74) Econoline. For throttle linkage, the decision was to go with the cable type linkage found on the 240's. This is different than the 144/170 from the pedal back, so you need the pedal, the shaft it mounts on, the bellcrank under the floor near the master cylinder, and the cable itself. For an automatic, you will also need the the kickdown rod and hardware. This comes off the bellcrank and runs straight back to the transmission. You will need the bellcrank from an automatic to use this type of kickdown since the manuals didn't have a place to attach the kickdown rod.

To mount the engine end of the throttle cable we got the cable bracket off the Maverick 250. Make sure it's off a 250! The bracket from the 200 is similar, but is shorter and the bolt holes that mount to the left side of the block are angled differently. This bracket bolts under the two coil mounting bolts and comes across the valve cover and under the inboard carb mounting bolt. The Maverick had a return spring as part of the cable, which pushed against the slot on the bracket. Since the Econoline cable does not have the spring built in, and has a diffrerent end, it was necessary to fabricate a way to clamp down the Econoline cable. What we did was cut off the clamp section of the 1967 Econoline (The 1965-'66 one is different and will not work (actually, the 1966 smog pump equipped ones have the same bracket, but these were sold in California only)) cable bracket and weld it to the Maverick bracket. The section with the slot was bent ober 90 degrees toward the carb and the clamp section was positioned such that the cable was located in the recessed area in the center of the bracket. The clamp was aligned so the cable pointed straight toward the throttle lever on the carb and it was welded in place. The Econoline cable is the right length and has the correct ball socket on the end to attach directly to the 250 carb. The same proceedure could be used when installing a 200 into an Econoline, but you must use the bracket from a 200 to get the height and coil mounting bolt patterns. A drawing is on the next page to help you sort this out.

There were several carburetors available for the 250. The carb we used was the manual choke version of the Carter YF, used on the 1969 (only!) Econoline 240. Any 250 carburetor should work with no problems. A 250 air cleaner was modified to an open element type by cutting out the sides so it looks kinda like an aftermarket unit. This was so it would fit under the box (barely).

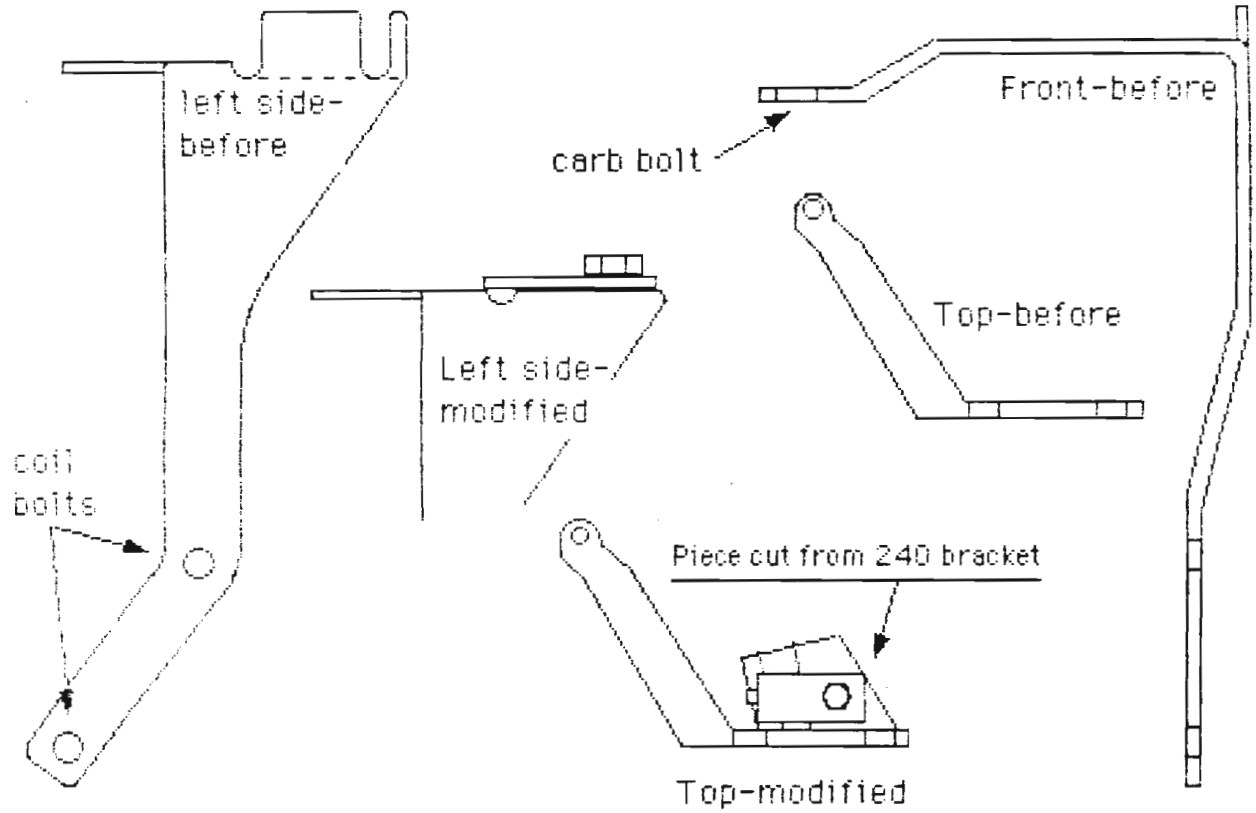
Well, as you can see, it's not the bolt in swap that a 200 is by any means. In fact, it was about two thirds the work of a V8 swap. There was no cutting of the floor or the engine box required, but the engine mount arms are, in my opinion, not strong enough for the 250. Eric says the floor flexes about a quarter inch upon gunning the motor. The crossmember would be the way to go here. The 250 is, on the other hand, a strong, reliable motor, and, when coupled to the automatic zips along pretty well. The rear axle is the heavy duty, 3.50:1 ratio, and this is about right for the sixes. Much taller and it won't pull a hill.

Summary:

Vehicle: 1962 Falcon Van
Engine: 1971 250 cid (Mustang)
Transmission: 1971 Maverick C4 with 1964 Econoline tailhousing and tailshaft, vent added to tailhousing. 250 bellhousing and torque converter, rear yoke from Econoline 240 trans.
Starter: 250 automatic
Generator: 1962 Econoline (eingine block modified to fit)
Driveshaft: custom built from dump truck PTO (240 automatic a bolt-in)
Rear axle: 1964 Econoline 9-inch, heavy duty, 3.50:1 ratio.

Engine mounts and arms: 1961-'64 Econoline 144/170 manual transmission (Ford part number C1DZ-6038-A), arms modified (crossmember planned).
Radiator and fan: 1965-'67 Econoline 240
Throttle Linkage: 1965-'67 Econoline 240 pedal, shaft, bellcrank, and cable. Engine end cable mount made from Maverick 250 and Econoline 240 brackets.
Steering column and shift linkage: 1965 Econoline automatic.
Carburetor: Carter YF manual choke from 1969 only Econoline 240 (part number: Motocraft CA-796-A, Ford D2TZ-9510-AB; $180.00 roughly (new))
Air cleaner: Mustang 250 modified to open element. JL

Throttle cable bracket for 250 conversion in early Econolines




## New Members

It was our custom last "year" to update members with a list of new members each newsletter. This section seems to have slipped by the last couple of newsletters, and a few requests for addresses of other members from new members jostled our memory as to our old habit. Leave it to Econo members to keep us on our toes! Keep it up. Here's the list of members that have joined and re-joined since our roster published two issues ago. BC

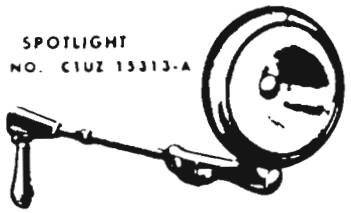
Dave Cassell
155 Whitehall Road
Rochester, NH 03867

Awaiting information.

| | | |
|---|---|---|
| Jim Culver<br>P.O. Box 2034<br>Glens Falls, NY 12801<br>(518) 798-8005 | 1965 Window Van, Extended | |
| Christopher B. Dunham<br>3793 Exile Dr.<br>Daytona Beach, FL 32019 | | |
| Pete Fey<br>105 East Circle Drive<br>Mason, OH 45040 | 1964 Regular Van | National show winner |
| John A. Grasso<br>1101 Queen Drive<br>West Chester, PA 19380<br>(215) 696-2229 | 1962 5-Window Pickup | 2nd owner, 108K miles |
| Earl Gruber<br>1391 LaBella Ave.<br>Sunnyvale, CA 94087<br>(408) 736-8327 | 1967 Regular Van, Extended | HD, 300 cid, Disks planned |
| Murray M. Martin<br>813 Heritage<br>Waterville, OH 43566<br>(419) 878-6640 | 1961 ?-Window Pickup | |
| Scott Meneely<br>440 Moffett Blvd., Space 105<br>Mountain View, CA 94043<br>(415) 961-5336 | 1961 3 Window Pickup | 302 V8, auto |
| Bob Nance<br>P.O. Box 54<br>West Salem, OH 44287<br>(419)853-4788 | 1965 5-Window Pickup<br>1967 Falcon Window Van | 4-speed<br>Extended |
| Ken Pearson<br>23730 S.W. Francis<br>Hillsboro, OR 97123<br>(503) 648-5572 | 1964 3-Window Pickup<br>1964? 5-Window Pickup | Ex-military<br>Parts truck |
| Donald J. Renner<br>7718 Lily Lake Rd.<br>Burlington, WI 53105<br>(414) 537-4916 | 1964 Window Van<br>1963 Regular Van<br>1966 Regular Van, Extended<br>1967 Regular Van | Auto, '67 brakes<br>'67 brakes<br>Heavy Duty<br>Wrecked, (for parts?) |
| Tony Smith<br>2224 7th. Ave<br>Oakland, CA 94606<br>(415) 836-0340 | 1964 Falcon Window Van | Travelwagon, factory 4-speed,200 cid, HD axle |

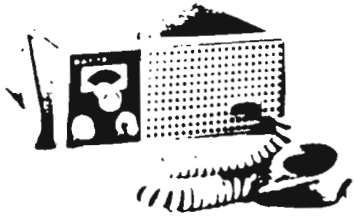
# 1966 FALCON

## Club Wagon and ECONOLINE Accessories



SPOTLIGHT
PART NO. C1UZ 15313-A

DELUXE WHEEL COVER
PART NO. C2OZ 1130-A

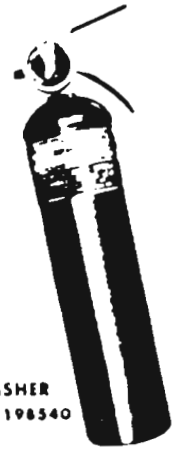


TWO-WAY RADIO
PART NO. C5AZ 18805-E

COMPASS
PART NO. C4RZ 19A548-A

1966

VENTILATED SEAT CUSHION
BASIC PART NO. 198501

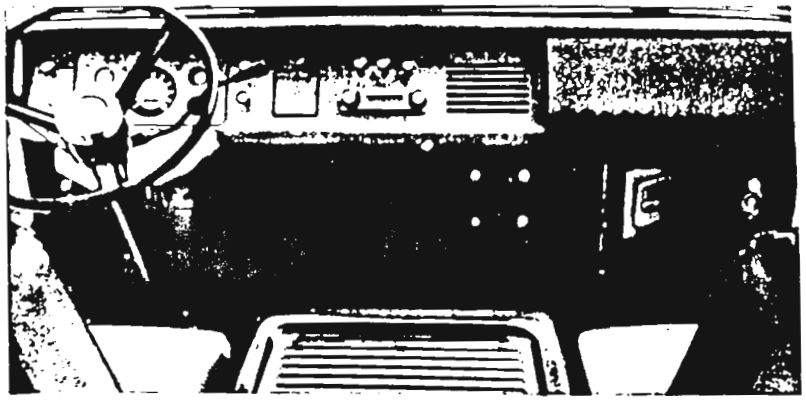


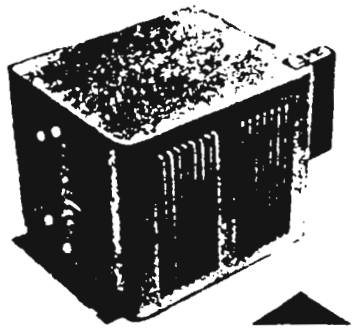
FIRE EXTINGUISHER
BASIC PART NO. 198540

LICENSE PLATE FRAME
PART NO. C4AZ 17A387-A



## COMFORT-CONDITIONED ENJOYMENT





### HOT WATER AUXILIARY HEATER

Give constant heat throughout cargo (second and third seat) area. Completely independent of regular heating system . . . features "within-easy-reach" temperature controls.
Part No. C5UZ 18455-B

### FRESH AIR HEATER

Provide fireside warmth on cold days. New design provides more efficient heat distribution . . . easily controlled for a wide range of comfortable temperatures.
Part No. C5UZ 18455-A