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ECONoline Organization Newsletter
February/March 1988

Well campers, this is it. The end of a great year of Econolining. I sincerely hope it has been as worthwhile to you as it has been to us. We started off with a vague idea of what to do and a list of people that had shown interest in Econolines. Since then I've learned a lot about newsletters, Mac computers and programs, and other Econoline freaks, lots of 'em! Jay and I have both obtained parts that we were looking for and benefitted by being exposed to ideas that we would otherwise not have learned of. In doing so, we've gotten nothing but positive feedback, and thus are gearing up mentally and physically to go through with the club for another year. We hope you'll be with us.

Some of the ideas that we're considering for newsletter articles next year include: Tire, wheel, and suspension facts and ideas; one way to do a front disc brake conversion; 200 and 250 six cylinder conversions, small six automatic conversion, fun and games with Dagenham 4 -speeds, the special models Falcon and Travelwagon, paint and body work the right way, spotting early Econolines, options that should have been, Econoline trivia (tougher for those of you that have seen earlier versions), more parts as we discover them, bits and pieces of V8 related tips, and maybe even a color xerox scrapbook. There's talk of a window decal being produced, sets of stock stickers or decals being made up, and patterns of stock parts being available. The possibilities are limited only by your input and our schedule and expertise.

To get in on next year's fun, there's a new, revised application in the back of this newsletter. Notice it has a section to indicate renewal. Don't bother with the section on dataplates, that's for new folks (unless you've added to your stable). The comments section is still valuable. We need fresh article ideas, sources of same, and your constructive crisis of this year's performance. If you can contribute an article, please let us know.

Recent input from Don English indicates that both Obsolete Inc and Joblot are out of NOS speedometer assemblies (C1TZ-17255A). We listed them last issue as being available. Somebody musta got 'em. Also via Don, from Light commercial Vehicle Association (LCVA), Carolina Classics is doing as well as J.C. Whitney: cheap, slow, wrong, and not worth the hassle. Not rip-offs, just a pain if you don't live close by. Don also recommends for any E-100 enthusiast's reading: "Ford Trucks Since 1905" by J.K. Wagner, published by Crestline. Don says to get it from Information Clearinghouse in LaMesa, CA, or Col. Bill White, Louisville, KY (sorry, no zips given for either).{Jay's note on Don's note: take the information in this book with a couple grains of salt - there is a lot of good information in the book, but there are quite a few blatant mistakes which are dangerously misleading. **BEWARE!!**}

William Williams was looking for and found a suitable pickup in the Florida area. He is interested in putting in both an air conditioning and a power steering setup. Problem: Jay nor I have had a need for such devices and, hence, havn't given the ideas much thought or notice. Has anybody out there ever seen or done either of these installations? If so, could you be so kind as to write both Mr. Williams and us and let us in on what you know.

On to this issue's tips: The first one comes via Lee Brown over the phone to Jay. Hopefully nothing got lost in the translation. The window division bar between the vent window and the roll down window in the front door is a problem spot when replacing the window guide felt or the rubber strip at the rear edge of the vent glass. When he did his, he had to drill the rivets out that hold the channel to the division bar and rivet the new channel in place. This was a bit tricky since the rivets are down in the channel and are hard to reach at best. Well, along comes Lee with the smart idea to try the complete division bar assembly from the 1961-66 F100 pickups. The story here is that the F100 bar is about 2-1/2 inches longer than the Econoline one and the angle bracket at the top points the wrong way. A few strokes of the old hacksaw makes quick work of the length difference and the top bracket is easily reversed by removing and reinstalling, pointing the other way. That's all there is to it! The rubber at the edge of the vent glass is already installed and is the same length as the Econoline one. The division bar is also available in stainless for those of you who like shiny things. The division bar is available from Dennis Carpenter, part numbers C1TZ-8122296-CA and C1TZ-8122297-CA for the painted ones. I don't have the numbers for the stainless ones. Thanks, Lee!

For van owners with regular old vans, here's a way to make the windows in the back or side doors (if you have any windows in either location) really worth having. On some of the regular and window vans the side and/or back door windows, as well as two fixed windows opposite the side doors have a pop open latch. What you may or may not know is that those windows bolt into the fixed window doors. Get a set of pop-open windows and the gaskets and screws to go with them from a yard or a parts van. Take out your fixed windows, change gaskets and bolt in the pop-open windows. The latch holes are covered by a small plate if your van is factory drilled for pop-open windows, even though it was equipped with fixed windows. A good cleaning where the old gasket was and some contact cement will help keep the pop-open window gasket in place. My van was the only one that we've seen that didn't have the holes for the pop-open windows factory drilled. All the better as far as I am concerned, because the pop-open windows in my van's back doors open so the latch side is to the middle of the truck, the opposite of normal. The holes were easy to line up and drill. Now, the air actually goes through the truck when moving, and makes a noticeable difference in summer comfort. As long as the front windows or vents are open, there's no problem with exhaust sucking back in. More air flows through the van when parked, too.

Since we are going to cover the conversion from a generator to an alternator in the V8 article, we thought that maybe a few people with small sixes and generators would like to update their electrical system too. We've seen many a truck in the yards and elsewhere with alternators hung on funky homemade brackets and now, at least a few people will know there is a better way to do the change. The parts you need come from any '65 and up Ford 170 or 200 six (NOT 250!). All you need to mount it is the timing cover and the alternator mount. The alternator can be almost any Ford product alternator. Get the electrical stuff mentioned in the section in the V8 article. Since changing the timing cover is involved, you may want to do this when you plan on changing the timing chain and front seal anyway. That way you won't have to go back in later, and aren't going to all the hassle for just an alternator. Save yourself some headaches and arrange to use a puller on the balancer if you don't own a puller. When you get through with the mechanical exchange, see the V8 article later in this issue for the electrical stuff.

The rest of this issue should keep you interested for at least a little while. First, we'll give you some more parts stuff. This time, since we didn't hear from Don until almost mailing time, Jay got in a strange mood and has decided share some of his secrets from all those years of junkyard wandering. We've got an intro to Econoline literature, as if you don't have enough stuff to collect already. We have a lot of stuff about the V8 conversion this time, mostly because we're trying to wrap up that series. There's the last installment article and a second article giving two examples of how V8's have been done. Tony Smith, a local Travelwagon owner and a heckuva guy wrote us a combined story/Travelwagon info article for us. Thanks Tony! To keep you and us straight as to what we talked about when, there's an index to all of this "year's" articles. As usual, we wrap up with new members and Econoline Classifieds. For a bonus, there's a complete roster at the end of the issue, and a renewal application.

Our next issue we'll try to make an April/May edition. We are shooting for a May 1 mailing date. If we have your application and $$$ by then, you'll be as up to date as we are. Sorry I can't hook you with what we have planned for the issue, but I guess the hook will have to be this fat issue you're reading. We really don't know what we're going to do yet. Meanwhile, have fun reading, and let some of that enthusiasm get out and actually work on your truck.

More Parts Information

After covering what's available new or repro and where to get it, there are still many items that are simply not available. There are also those of you, like me, who would rather spend countless hours wading through the mud at the local junkyard (excuse me, wrecking yard, don't ever let them hear you call it junk!) than simply forking out the cash for the new parts. In doing this you may wonder exactly what year truck you are looking at and what parts from other years/makes/models will fit. I will attempt to enlighten you by giving a partial listing of what to look for and what fits. These are listed in a purely arbitrary order as they come off the top of my head, so bear with me as I attempt to make some sense of all this.

Turn signal lens - front. There were two versions available here. The 1961-62 were clear and had a plated edge on the plastic. The 1963-67 were amber and did not have the plated edge. The 1963-67 Falcon vans, the 1965-67 Deluxe pickup and 1966-67 Econolines with the beltline trim and chrome bumper package had an aluminum anodized rim or "door" which fit over the regular amber lens. Either the clear or amber lens will fit any year Econoline. Note that some of the repro replacement lenses (Glo-brite, etc.) do not fit as well as the originals in some cases, others are fine. Also note that the repro 1961-62 clear lenses have the edge painted silver instead of plated and are not as nice looking.

Tail light lens - all except Supervan. Again, two versions. One had the reflector in the center, the other had a Fresnel pattern. Did not seem to depend on the year, may have been state - related. Either will fit any of the short vans. These were also used on the 1957-63 Ford styleside pickups as well as the 4wd F100 & 250 from 1961-63.

Tail light lens - Supervan. Two versions - with and without backup lens. The 1965-66 did not have the backups (no, not even as an option) while all the 1967's did. The sockets are different also, of course, but either will fit as an assembly. The backup light switch in the 1967's was on the transmission on the automatics as part of the neutral start switch. It was under the steering column support on the 3 speeds with the actuating tab attached to the shift tube. These lenses also fit the Ford pickups - the 1964-66 were without backups, the 1967-72 had them. The 1969-74 Econoline lenses were the same also and had the backups.

Backup light lens and bezel - 1967 except Supervan. The 1967's were the first and only early Econolines to have the backup lights, thanks to new federal vehicle

adjustment also. Note that the side doors fit the rear and vice-versa as well. The only differences here are that the rear doors have the "Ford" lettering on them, and the right rear door did not have an inside handle or lock button. The side and rear doors came with and without windows and of course one type can be traded for the other. Hopefully, you've already read Brian's tips for this month, so you know about there being both fixed and pop open windows.

Seats. There were some changes and variations in the stock Econoline seats, so be prepared for anything here. There were two basic versions of the seats: the 1961-64 and 1965-67. The 1961-64 seats were more rounded and sat higher, the later ones were squared off and lower. The tracks and supports were different for the two versions. Either type will fit either year group but be sure to use the tracks and mounts that came with the seat, not with the truck. Some of the Econolines had an optional fold-away seat on the passenger side. This mounted to a heavy cast bracket on the wheelwell and slid into a track on the side of the engine box. This seat could be folded to the side or lifted and removed completely without removing any bolts. Another option was the folding seat on the driver's side. This looked like the stock seat but the back folded forward for access to the battery and rear area. This was especially useful on the pickups, but was available on the vans as well.

Dash Pad and Glove Box Door. The padded dash and glove box door was an option on the Econolines all the way back to 1961 although it is rare to see it on a pre-1966 one. The color was basic black, although the Falcon Deluxe Club Wagon (DCW from here on) had a dark blue, and later tan, one (which was standard equipment on the DCW). Starting in 1966 the pad was standard equipment but could be deleted on special orders. On the 1961-65 Econoline the padded glove box came with the padded dash (as part of the safety package, which also included padded visors). The 1961 and 1962 Econolines did not have a glove box door at all unless ordered with the padded one, the metal and padded doors were both optional in 1963, the metal one became standard in 1964. In 1966 the padded door became standard along with the dash pad and a pushbutton lock was added to the padded door. The earlier padded door was flat with no recess for the lock and latched with a spring clip in the dash. The metal doors all had the pushbutton lock and the locks will interchange between metal and padded doors. Although the padded dash was standard on the DCW the padded door was optional and was blue from 1961-64. (all of the early DCW's were blue) From 1965 to 1967 the DCW was available in blue or gold and the dash pad was available in blue, tan, or black. The blue vans had a matching blue dash pad and optional blue glove box pad. The gold vans had a standard tan dash pad but if ordered with the padded glovebox the dash and glovebox were black. There was no tan padded glovebox door as far as I can tell. The padded dash can be installed in any of the Econolines either with or without the padded glove box. The dash mounts with a whole bunch of studs which would require drilling the dash all to heck. My approach was to cut off the studs with a cutoff disc and glue it down with silicone sealer. Brian's version was a modification of this - he cut off all the studs except the ones at the two corners, which only required drilling two holes. The rest was glued down with silicone. This works better since the ends tend to come loose if glued down. To mount the padded glove box door you will need to drill new mounting holes. The glove box door, both padded and not padded, originally had a cable to limit how far it opened. This item is seldom seen and is not really needed, but if you see one, grab it. To make things even more confusing, there were two versions of the fiberglass dash skirt used on the Deluxe Club Wagons. One was cut out for the padded door, the other was not. If you plan to install one of these, make sure you get the one that matches the glove box door you are using.

regulations. These were mounted below the taillights just above the bumper. The chrome bases were exclusive to the 1967 Econoline only, but the socket and lens were apparently an aftermarket item that Ford used as a stopgap, knowing that they would only be used for one year. Look for the lens and socket on Jeep CJ's and Wagoneers. The front turn signal lens and socket from 1957-60 Rambler Americans (!!!) are nearly identical also, the lens has finer fluting but is dimensionally identical. In addition, the lens and socket may still be available through lighting houses.

Arm Rests. These were available in seven colors in the Econolines - black, blue, red, green, tan as well as dark blue metallic and medium blue in the Deluxe Club Wagons. The same style arm rests were also used in the Ford pickups from 1961-66 as well as the Falcon cars from 1960-63. The Falcons had several other colors available if that excites you. Also look for the same armrests in Austin America and Marina. Yes, really. The Brit's knew a good thing when they saw it, apparently, and copied the Econoline armrest down to the shape and dimensions. I have seen these in black, red, and dark tan. If you really care, the grain is a touch coarser, but only someone with good eyes will be able to tell the difference.

Instrument Cluster. The Econoline came with a couple of variations here. The standard instrument cluster had gauges for fuel and temperature and lights for oil pressure and generator or alternator. The 1961-64 ones said "GEN" while the alternator - equipped 1964's and all 1965-67's said "ALT". The optional full instruments were available from 1965-67 and had ammeter and oil pressure gauges instead of the idiot lights. A bit of rewiring is needed to convert to the full gauges but they will fit, of course. The instrument cluster in 1957-60 Ford pickups was the same basic unit. The 1957-58 ones were identical to the 1961-64 Econoline, the 1959-60 had metallic gray backgrounds and mask instead of the Econoline's silver backgrounds and black mask. The gray gauges are quite nice looking, I'm waiting to see them in an Econoline (hint hint). The recent F600 trucks had a very similar set of gauges also, only with black backgrounds. My bet is that these will fit also. I saw them in a U-Haul I was driving for the shop. This was the full set, not the idiot light version.

Heater Knobs. There were two versions of the heater control knobs used in the Econolines. The 1961-64 version was used on the floor-mounted heater and was held on with a set screw. The same knobs were used on the wiper switch and the 1963-64 optional emergency flasher switch. (The 1961-62's also had optional emergency flashers, but used a different switch which had a transparent red knob with the indicator lamp built in.) The 1965-67 knobs for the defroster and wiper switch had a release clip instead of a set screw, which was pushed through a slot in the base of the knob but otherwise looked the same as the 1961-64 knobs. The knobs for the temperature and heat controls were pressed over the shafts and were not made to be removed. However, if you need to replace them you can pry, carve, hammer, or torch them off and use the 1961-64 knobs to replace them. Look for these knobs also on the 1961-66 Ford pickups. To remove the white inserts, put the knob in hot water for a minute or two and tap it on the side below the level of the insert. Be careful, as the inserts chip easily.

Body Parts. The doors are interchangeable from 1961 to 1967 with only a few strange things to watch for. The front doors came with two different bolt sizes where the door limiter strap attaches. The early ones had smaller bolts than the later ones. The threaded holes in the hinges where the bolts from the body go came in fine and coarse thread, so if the bolts don't go in easily you know why . Other than that, any front door will fit any Econoline from 1961 to 1967. Another minor difference is that starting in 1962 a Ford emblem was used on the inside of the passenger door just below the vent window. Can't have those fools thinking they're riding in a Chevy, can we. The side and rear doors also have a few things to watch for. The latches at the center (not top and bottom) were changed twice so there are three versions available. As long as you switch doors in matched pairs everything is fine. Otherwise, be sure to use the matching latch assemblies and striker plates. *See Brian's tip last issue about anti-rattle clips and door

Literature Dealers

Another aspect of the automotive enthusiasts hobby is that of literature. Literature is available for just about every make and model car ever produced. Auto literature has many forms. You'll find magazine ads, dealer catalogs and sales brochures, option lists, repair manuals and parts books. People actually collect this stuff, usually to go with or inform them about whatever vehicle they own. Some folks have gone so far as to collect whatever they can lay their hands and resell it to those with more specific needs. What we've collected here is a list of such people that we've dealt with in the recent and not-so-recent past that have had literature pertaining to early Econolines. They are arranged in the order we wrote them down, not something fancy like by preference or logical like alphabetical. A few hints that'll make it easier to deal with these vendors. 1) Always send a self-addressed, stamped envelope (SASE). 2) Include the year, make, model, and option package (if applicable) that you're after. Be specific. Use words, when possible; an E141 won't mean anything to them. 3) If mail order isn't your bag, and/or you want to see what you're buying, there's always been at least one literature vendor at every swap meet I've been to. 4) Don English (who helped with some of this) suggests that you direct your efforts to those vendors who advertise that they carry Ford trucks up through 1967. If you have a Falcon Station Bus or Club Wagon, these were considered part of the "car" line and looking under Falcon cars might help you turn up some sales literature, salesman handbooks, or dealer albums. If you want to know a little more specifically what's out there in the way of literature, Jay and Brian both have quite a bit of the stuff. Call us! Have fun, and good luck hunting.

John W. Wimble
1407 Stonycreek Dr.
Richmond, VA 23233
(804) 740-0652

Extensive listing of 12000 items avail. for $2.00

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6710 Brooklawn Parkway
Syracuse, NY 13211
(315) 432-8282

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30231 Barwell Road
Farmington Hills, MI 48018

SASE with specific needs.
Prompt service; reasonable prices.

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Waukesha, WI 53187
(414) 547-0757, Sat only, 10-4.

SASE with specific needs.

Gene Hewitt
RT. 2 Box 127A
Ellijay, GA 30540

SASE with specific needs; magazine articles indexed and listed by year and make!! Great listing.

Gail Day
1259 Lilac Dr.
Chesire, CT 06410

SASE with specific needs.

Chewning's Auto Literature Ltd. 123 North Main St., Box 727 Broadway, VA 22815 (800) 323-4604	SASE with specific needs. Computer listing. Carry shop manuals, owners manuals, sales literature, parts books, salesman handbooks, and dealer albums. Prices include shipping. Take MC/Visa.
Jerry Bougher 3628 Union St. SE Albany, OR 97321	Always has lots of early Econoline ads at swap meets. SASE with specific needs.
John Dragich Discount Auto Literature 1500 93'rd Lane NE Minneapolis, MN 55434 (800) 328-8484	SASE with specific needs. Carries Shop manuals, auto books, parts books, and interchange manuals. $3-$4 shipping per order. Takes Am.Exp./MC/Visa.
Faxon's Auto Literature 1655 East Sixth Street Corona, CA 91719 (800) 458-2734 or (714) 735-6183	Carries shop manuals, owners manuals, sales literature, parts books, and other stuff. $3 shipping per order. Takesw MC/Visa.
Applegate and Applegate Box 1 Annville, PA 17003	Carry owners manuals and sales literature. $2 shipping per order.

Article Index

Mostly because we kept getting confused as to when we covered what topic, or if we ever even covered it, we decided to do an article index. After we did that, we thought maybe you folks might be just as confused, or might want a quick reference, so we've gone the extra step to type it into the old computer. The names in the parentheses indicate who wrote each article or where we stole it from. At any rate, that's the person to talk to if you have questions about that article.

April/ May 1987

I. Production and Identification (Jay)
- a. Decoding the dataplate
- b. Model numbers

June/July 1987

I. Within Brian's stuff:
- a. Rarest of the rare (Brian and Jay)
- b. Tips
  1. Speednuts for bellypans (Brian)
  2. Bushings for shiftrods (Jay)
  3. John's motor mount (John Grasso)

II. Heavy duty rear axle swap (Jay)
- a. Driveshaft lengths
- b. Speedometer correction

III. More production information (Jay)
- a. Serial numbers and dates
- b. Paint codes
- c. Transmission codes
- d. DSO codes

IV. Member roster to date (Brian)

August/September 1987

I. Brian's tips
   a. Shift column bracket fix (Brian)
   b. Heater control valve from Ford pickup (Jay)
   c. STP in steering box (from Lee Brown)
II. Dual master brake cylinder conversion (Jay)
III. Still more production information (Jay)
   a. Engine transmission combinations
   b. Axle codes
IV. Power window conversion (Harold Mezo and Terry Wheeler)
   a. Wiring to doors (Jay)

October/November 1987

I. Brian's stuff
   a. Corrections to engine/trans table in Aug/Sept. (Jay)
   b. Tips
      a. Threading 1964 shift lever (Brian)
      b. Replacement mirror glass (Jay)
      c. Phone company door checkstraps (Brian)
II. Parts and services, Part 1 (Don English)
   a. Vendor listing
III. Steering wheels and turnsignal switches (Jay)
IV. V8 swap, Part 1 (Brian and Jay)
   a. Thinking about it

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I. Brian's tips
   1) Finned brake drums (Jay)
   2) Anti-rattle door clips (Brian)
   3) Wiring park lights to headlights (Jay)
II. Parts continued (Don English)
   a. By item with vendors and amount
   b. Additional vendors
III. V8 continued (Jay)
   a. The meat

February/March 1988

I. Brian's tips
   a. Lee Brown's window division bar (Lee Brown)
   b. Putting window van pop-open windows into regular vans (Brian)
   c. Small six alternator conversion (Jay)
II. More parts information (Jay)
   a. Junkyard substitutes
   b. Econoline differences
III. Literature dealers (Brian and Jay)
IV. Article index (Brian)
V. V8 conversion, Part 3 (Brian and Jay)
   a. Driveshaft angles and length
   b. Electrical and alternator
   c. Crossmember differences and mounting
   d. Throttle cable mounts
   e. Clutch rod using Heim joints
   f. Bulkhead extra hole

VI. Two examples of V8 conversions (Brian and Jay)
  a. Jay's
  b. Brian's
VII. Adventuring in the Night-sea Journey, Part 1 (Tony Smith)
VIII. Final member roster (Brian)

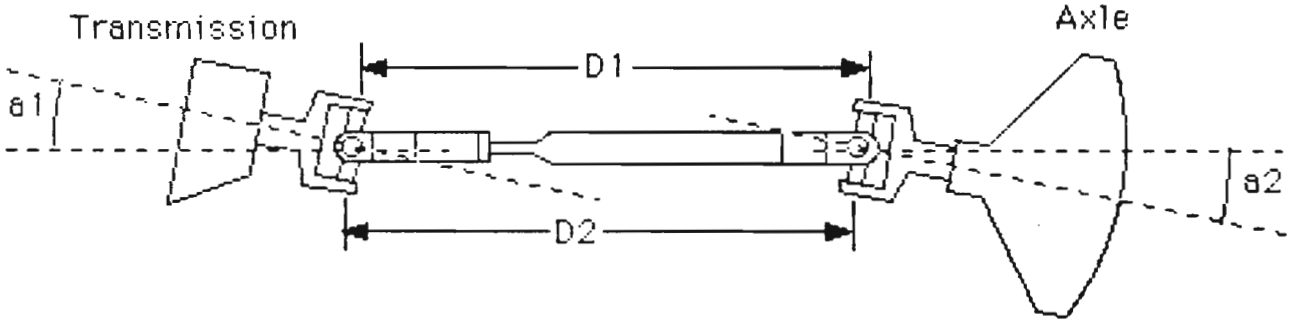
V8 Conversion Continued, Part III

This issue's article is kind of a catch-all. We'll finish giving you some of the stuff that we promised from last issue, show you some pictures to help clarify the details, and tell you anything else that we think of that may help you along.

Driveshaft length and angles.

To correctly align the driveshaft you will need to make a couple of measurements to see how close to parallel you are and how much offset there is between the two yokes. The idea here is to make the shafts on the transmission and the rear axle run parallel so the axle spins at a constant velocity. You don't want to run things in a straight line, however, since this will not allow the u-joints to rotate and will cause the needle bearings to dig into the crosspieces. To check for parallel, measure from center to center of the u-joints across the top and bottom of the driveshaft with it in the position shown in Figure 1 (D1 and D2). Any difference between the two measurements means you are not parallel. This can be corrected by raising or lowering the rear of the transmission or by using tapered shims between the rear springs and the pads on the axle housing. These shims are available at most 4 wheel drive shops and also as truck front end alignment shims.

Figure 1. Driveshaft angles and measurements.



Refer to the Table 1 to find the closest shim for the measured difference. If between two sizes, choose the one which will make D2 the longer of the two measurements since the axle will torque slightly upward under acceleration, when the load on the u-joints is the greatest. The offset should be in the range of two to four inches. This is not as critical as the parallel alignment, but will affect the life of the u-joints. Note that the measurements given in the chart assume that you are using the large front yoke and the 9-inch axle so that you have the large u-joints front and rear. The numbers for the small u-joints will be different and will not be covered here since they are really not strong enough for the V8. Table 2 should look a bit familiar. It's the table from the heavy-duty axle swap--with a few changes. It has been provided in case a stock driveshaft will work in your application. Around here, at least, junkyard prices are much cheaper than having a driveshaft made to length.

Table 1. Use to find correct shims to align driveshaft:

Measured Difference: D1 - D2 or D2 - D1	Resulting Angle Difference a1-a2 or a2-a1
1/16"	1.1 deg.
1/8 "	2.2 deg.
3/16"	3.3 deg.
1/4 "	4.4 deg.

Table 2. Econoline Driveshafts:

Year/Engine	Trans	Duty	Front Yoke	Rear Yoke	Length C-C*
1961-'62/144,170	3-speed	Light	slip	small	N/A
1963-'64/144,170	3-speed	Light	small	small	29-5/8"
	3-speed	Heavy	small	large	29-3/8"
	4-speed	Light	small	small	30-5/8"
	4-speed	Heavy	small	large	30-3/8"
1964/170	Auto	Light	small	small	22-7/8"
	Auto	Heavy	small	large	22-5/8"
1965-'67/170,200	3-speed	Light	small	small	29-5/8"
	3-speed	Heavy	small	large	29-3/8"
	Auto	Light	small	small	22-7/8"
	Auto	Heavy	small	large	22-5/8"
1965-'67/240	3-speed	All	large	large	29-3/8"
	Auto	All	large	large	22-5/8"

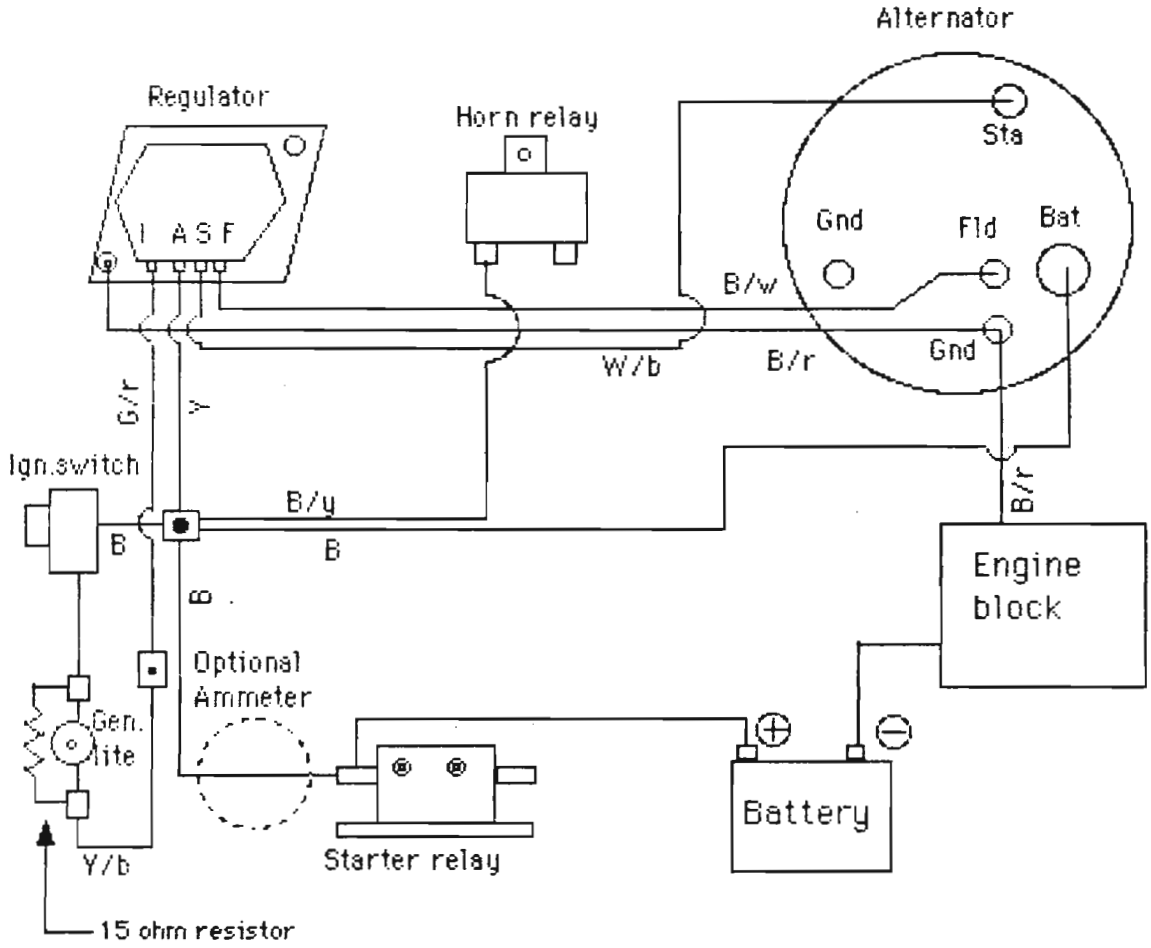
* Length measured center to center of U-joints as installed in the truck.

Electrical and alternator. There are no major changes required to connect the electrical items on the V8. The biggest change would be the conversion to an alternator system if you are going to do that. The early small block V8's were also available with a generator setup if you must have it that way. The stock temperature gauge and warning lights will work with the V8 as will the optional amp and oil pressure gauges if you're fortunate enough to have these. The ignition and starter don't require any changes except rerouting the wiring a bit.

To convert the wiring from a generator to an alternator you will need to make a few changes. The parts you will need are the alternator, the voltage regulator and mounting bracket, the wiring harness from alternator to regulator, a 15 ohm, 5 watt resistor, and a few crimp terminals. From 1965 to present most Ford products have used the same basic alternator. There are a few different output ratings, but the mounting and hookup are the same on all. To simplify things, you can use a ready-made wiring harness by getting one from an alternator-equipped Econoline or another Ford product. The Econolines first came with an alternator as an option in 1964. Beginning in 1965 the alternator was standard. Remove the wiring as a unit - the wires connect to the alternator with nuts on the studs, the voltage regulator unplugs, and the heavy wire to the starter relay unplugs in front of the regulator. Another wiring harness that will work is the one from a 1965-66 full size Ford car. Everything will unplug from the car

except the thick black wire and the thin yellow one, both of which should be cut about six inches past the regulator plug. Doubtless many others will work as well, but these are the ones I have worked with.

Figure 2. Alternator wiring.

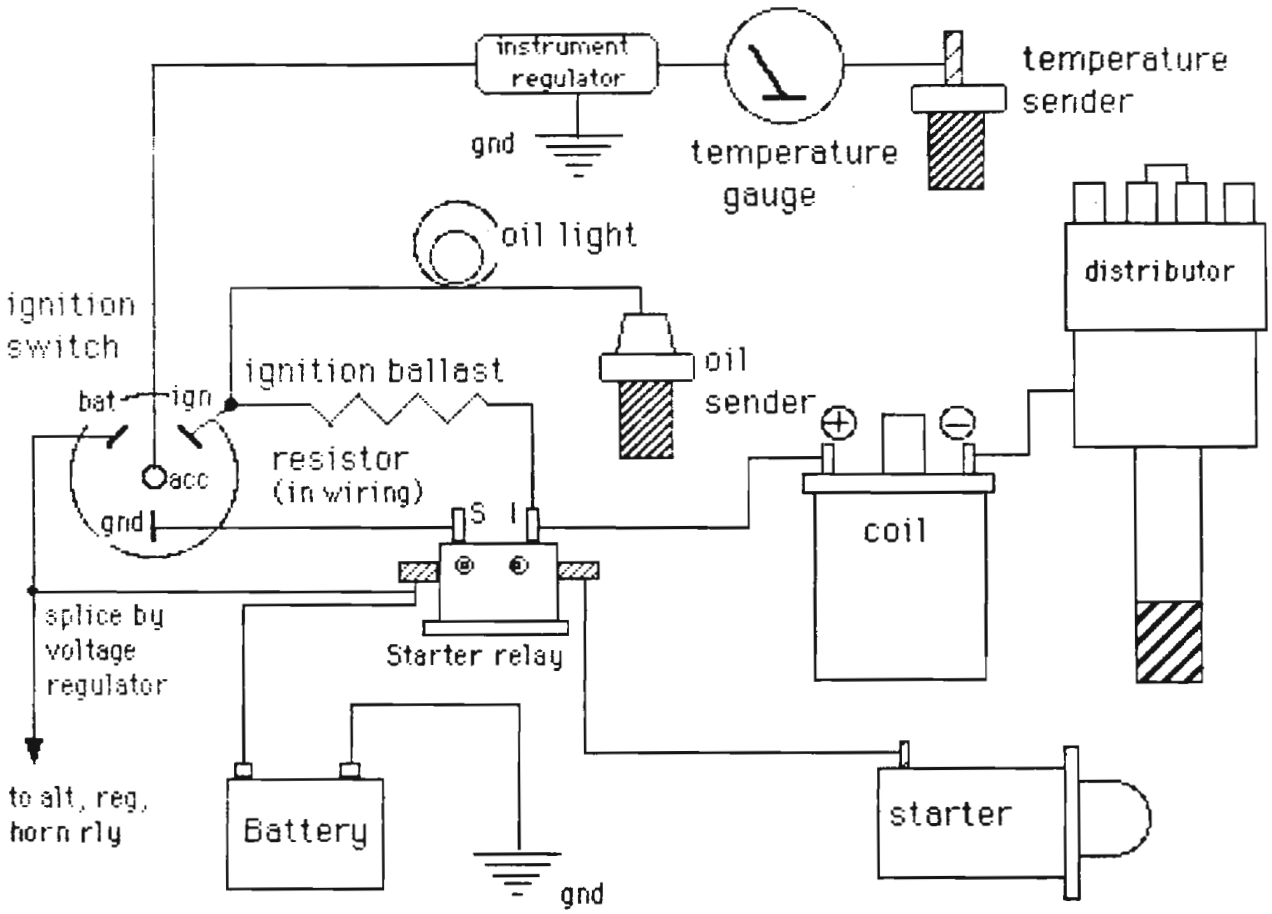


Format = M/s = Main wire color/stripe color
Legend: Y/b = Yellow/black; W/b = White/black; B/w = Black/white; B/r = Black/red
B/y = Black/yellow; G/r = Green/red; B = Black; Y = yellow
⊡ = splice

When the original generator and regulator are removed you will be left with a bunch of loose wires. At the generator there is a heavy wire and two small wires which go to the regulator. These can be removed since the alternator wiring will replace them. The alternator wiring harness that you are installing has four wires that go to the alternator. The black/white one (black with a white stripe) goes to the field (F) terminal. The white/black one goes to the stator (S) terminal. The heavy black one goes to the battery (BAT) terminal (the big one). Finally, the black/red one goes to one of the ground terminals (the case). There will be a short length of black/red wire spliced to the end of the ground wire which should be grounded to the engine block. At the regulator area you have three heavy wires and four smaller ones already in the truck, plus the new harness from the alternator.. After removing the three from the generator you have four remaining. The heavy yellow one is the hot wire to the ignition switch

through which everything in the truck gets power. The heavy black one is the hot wire from the starter relay which the power comes through. If you are using an ammeter it should be in line with this wire. The black/yellow one is the power lead to the horn relay.

Figure 3 Engine wiring.



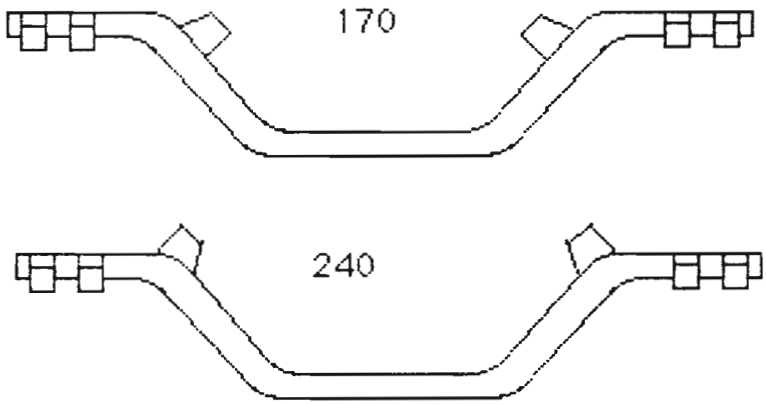
The last is the yellow/black wire to the "GEN" light on the dash. The yellow/black one should be spliced to the green/red wire from the regulator plug. The other three wires are to be spliced together, and to the yellow wire from the regulator, and to the thick black wire from the alternator harness. (There are five wires in all to be spliced here.) This connection will be in front of the radiator near the voltage regulator. Make absolutely sure that this connection is tight and well insulated since it is hot all the time. One way to do this is to put a ring terminal on each wire and to put a nut and bolt through the middle of them. Tape the connection with several layers of electrical tape and secure to the other wiring with tape or wire ties. The final step is to install a resistor across the "GEN" light. The original alternator wiring has this built in to the harness as a length of resistance wire under the dash, but the generator wiring does not. You will need to cheat and install a separate resistor. This should be a 15 ohm, 5 watt one which is available at any TV supply house. Simply connect across the two wires of the light, leaving the light intact. Be sure to insulate the connections with tape. The purpose of this resistor is to supply the initial field current to get the alternator to start charging when the engine is first started. Without the resistor, you have to rev the engine to get the field relay to kick in and start the system charging, and, if the light burns out the

alternator will not charge the battery at all. Note that if you have installed the optional ammeter you will still need the resistor, even though the light is not used. That's it. Fire it up and check for smoke and strange noises. If you have access to a voltmeter the voltage at the battery should be about 14-15 volts with the engine running. See Figure 2 for the wiring details.

For the other engine wiring follow the connections from the six cylinder engine as everything works the same. Make sure that the temperature sending unit is for a gauge rather than an idiot light. The six cylinder sender should fit. For the oil pressure light or gauge also make sure that you have the right type of sender. The generator or alternator light is taken care of in the alternator wiring. See Figure 3 for the engine wiring.

Crossmembers. Something else we've talked about previously is which crossmember to use. We recommend using the 170 crossmember from 1965 to 1967 trucks. What we'd like to show here is the difference between a 170 and a 240 crossmember, so when you go looking for one, you get the right one.

Figure 4. The two crossmembers, showing the different pad heights.



Look at it from front or back (Figure 4), and notice that the pads on the 170 sit much lower on the crossmember that the 240 pads. Even if there's no running gear left under the truck to give you a clue as to what it is, you can now tell by looking.

The second thing to tell you about is how we mounted the outer end of the crossmember, when both our trucks didn't have the mount. The figure xe shows that we sandwiched the frame box wall between a bar inside the frame and a piece of angle iron that became the outer mount (Figure 5). DON'T put a bolt all the way through the frame to hold the angle iron on, you'll crush and distort the frame box. If you have a '65 -'67, never mind, Ford took care of this for you. Jay and Brian differed in where they put the hole that allowed the bar to get inside the frame box. Jay put a slot in the outside of the frame, so that when the angle iron was in place, it covered the hole. Brian put a bigger hole in the top of the frame box, through the floor of the truck and made a small plate to cover it when done. Six to one, a half dozen to the other. Your choice. Brian appreciated his version when he put a similar plate in the bottom of the frame box to hold a Chevy radiator cross bracesince the hole was already there.

Throttle cable mounts. Jay and Brian have both spent a lot of time trying different throttle cable mount schemes. The '65 to '67 240 pedal bellcrank is the best bet on the pedal end. We're giving you a scale template you can copy, cut out, and use to locate the holes if you are working with an earlier truck (Figure 7). We're trying to save y'all from repeating the same mistakes we made. The carburetor end of the cable is not as easy, but if you do things the way we're showing, it'll be less of a battle. Figure 6 attempts to show how we modified a 240 throttle cable bracket. The things to notice are

the height, and that the fit next to the manifold is what keeps it from turning, since only one bolt holds it in place. Basically, you cut the thing down, and make two tabs. We found the '69 - '74 six cylinder Econoline throttle cable to be the thing to use. Brian's working on using the '69 - '74 V8 Econoline throttle linkage, and if he gets it to work we'll do an article later.

Figure 5. Crossmember mount view.

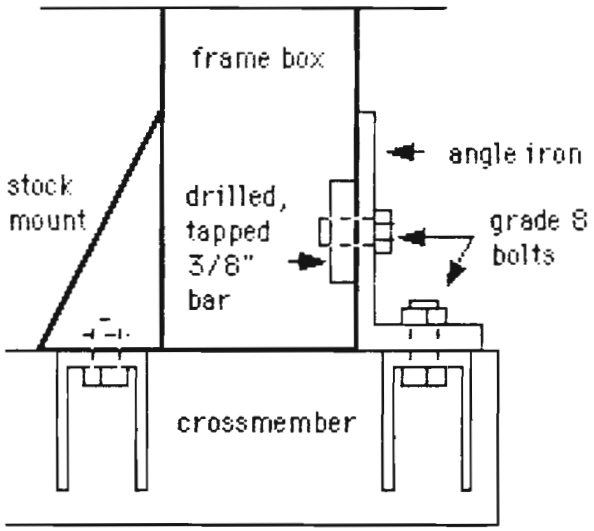
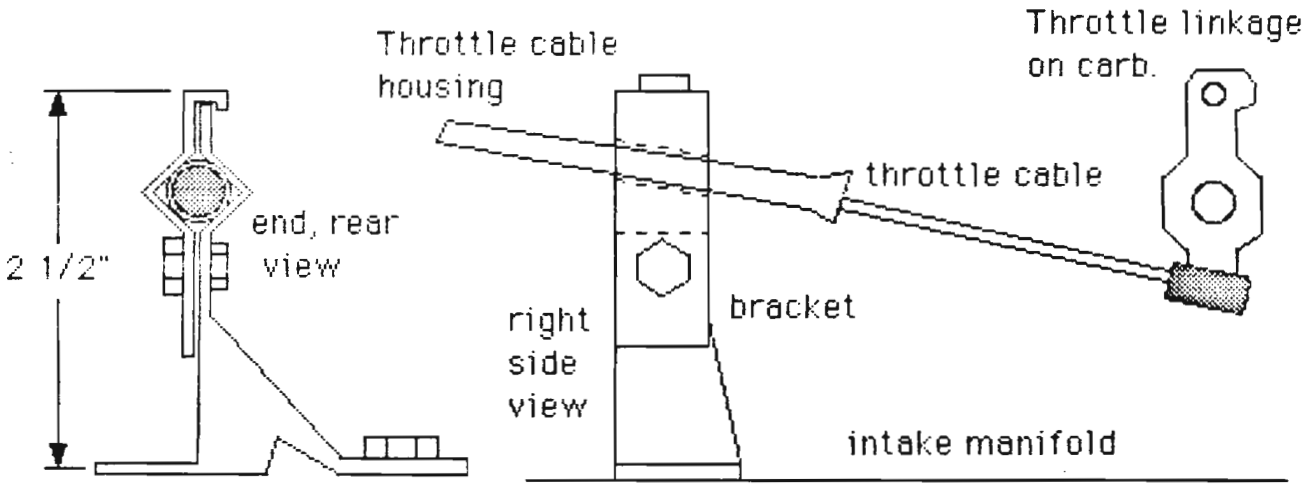


Figure 6. Throttle cable mount at engine end.



Clutch rod. The stock early Econoline clutch rod had a loop at one end and a 90 degree bend with a pin at the other. It's a little on the skinny side, and both ends are prone to wear out. Jay's solution is to buy two "heim" joints, two coupling nuts to fit them and some hot rolled rod. Our local hardware store actually carried the heim joints, but it is somewhat of an exceptional store. Another name is spherical rod ends.

Figure 7. Scale template showing locations of holes needed to install pedal bellcrank in 1961-1964 Econolines.

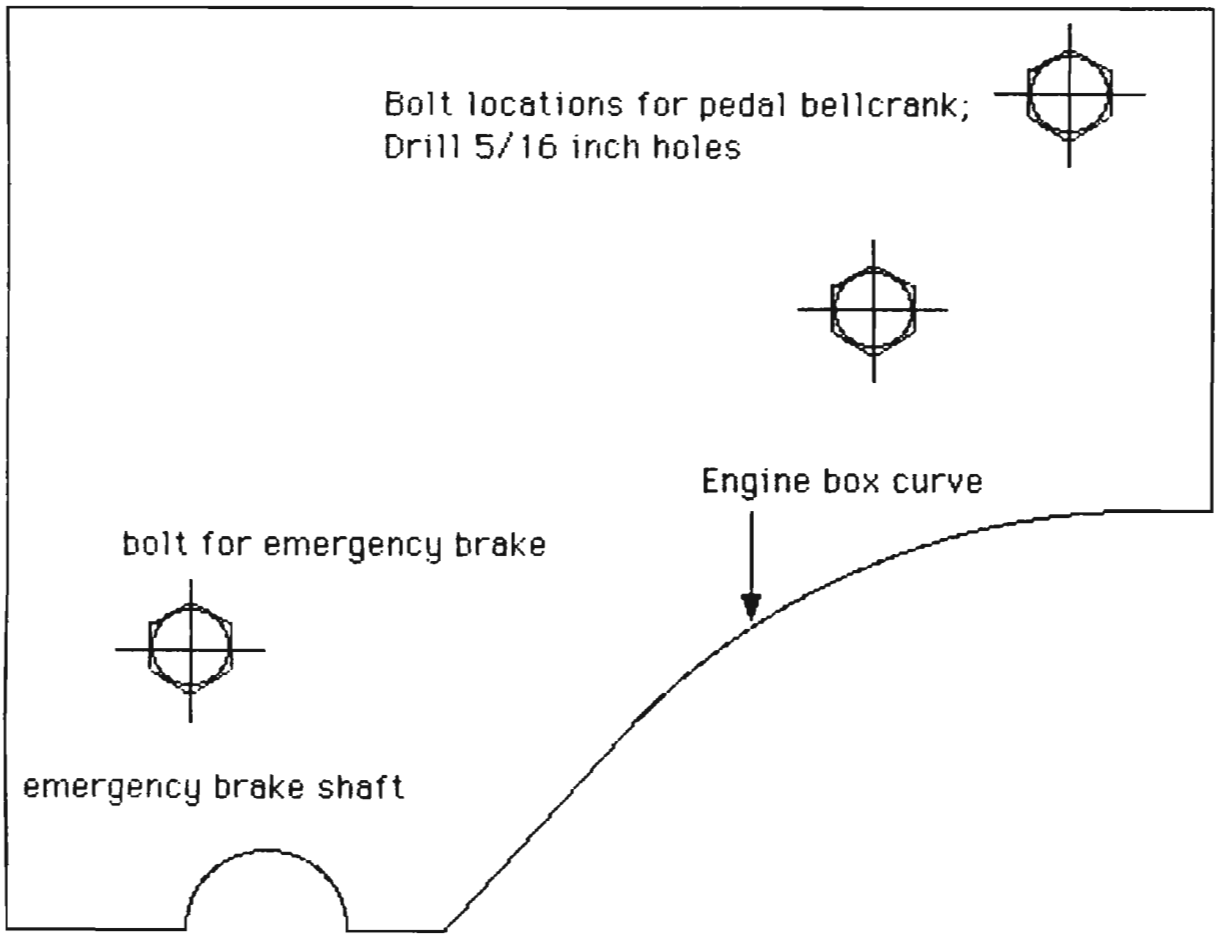
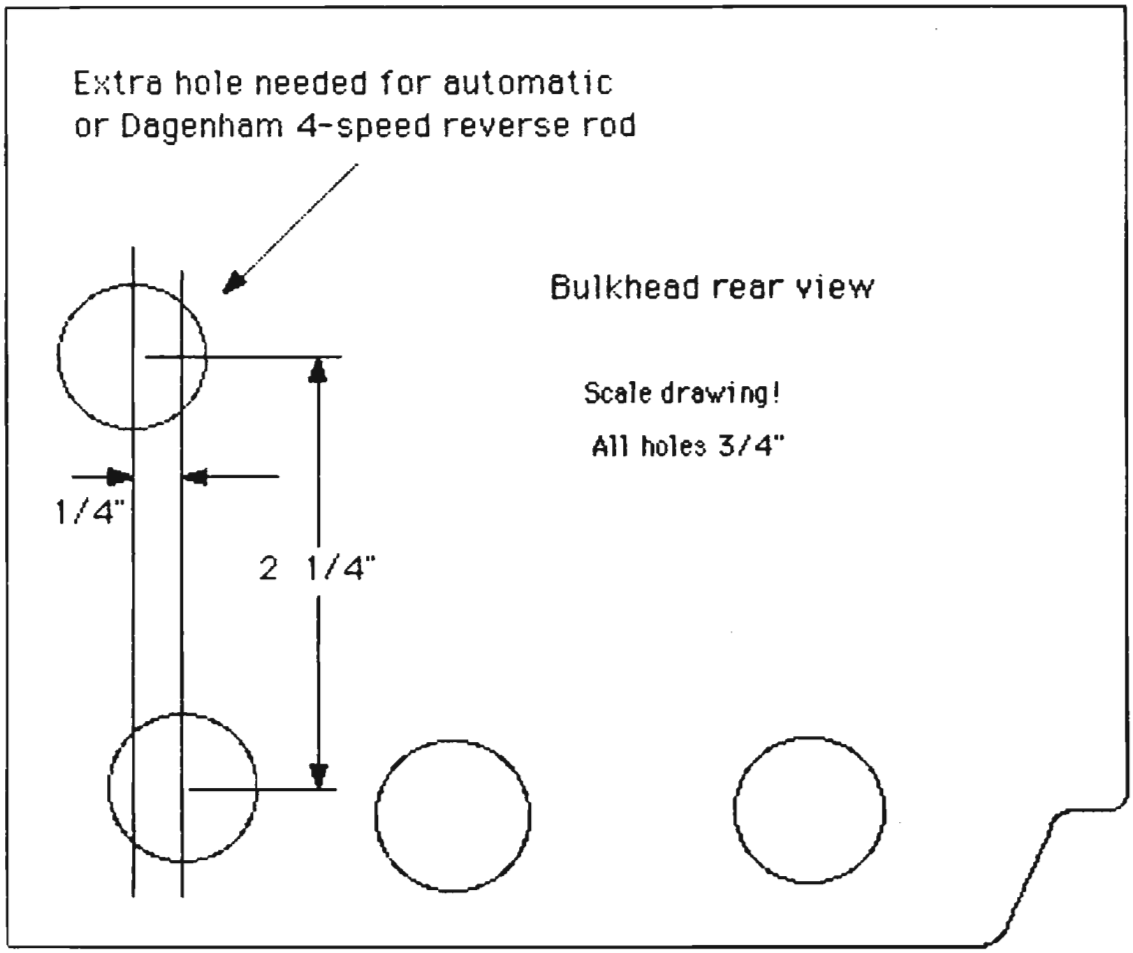
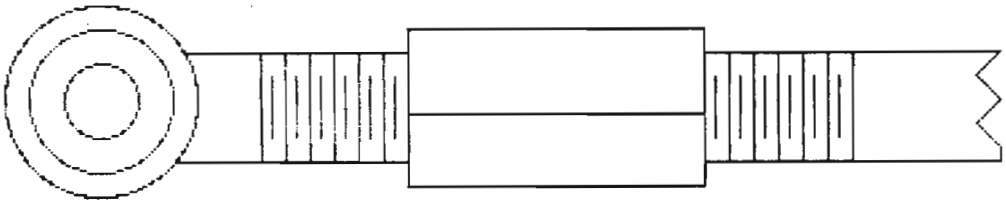


Figure 8. Scale template of driver's side bulkhead showing location of extra hole needed on 1961-1963 Econolines when changing from 3-speed transmission to automatic Dagenham 4-spd.



It may take a bit of looking to find these. If you are moving the clutch bellcrank, measure the new length, or measure your old rod, cut the new rod, thread it's ends to match the heim joint and coupling nut, and bolt things together. Open the hole at the clutch pedal and remove the pin from the bellcrank and drill them out to match the holes in the heim joints. Slide grade 8 bolts through and tighten. Industrial strength clutch rod. Even stands up to Jay's abuse. Figure 9 might further enlighten you.

Figure 9. Heim joint to clutch rod detail.



Lastly, we put together a scale template of the driver's side bulkhead that you'll need when you want to put a Dagenham 4-speed in a 3-speed truck, or an automatic transmission in a 3-speed truck. Jay and I used the original holes when we did our V8's (read on), but we thought that maybe one of you could use the info. in a V8 context as well. It's Figure 8. It is also a scale template. It is on a separate sheet of paper so you can cut it out and use it!.

That's just about all the technical stuff that we have to tell you about putting a V8 into an early Econoline. As a capper, we're going to tell two stories about how V8's have been done successfully. Good luck!

Two Examples of V8 Swaps

Jay's, by Jay. When I bought my 1961 pickup it was in the midst of a V8 installation, the wrong way. At the time I had never seen an early Econoline with a V8 installed and had absolutely no previous experience in engine swapping or fabrication of this sort. I was determined, however, that this would make a good setup and would make me happy even if it made me miserable in the process. After looking it over and removing everything I didn't like, I was left with an engine sitting there (on the floor, not in the truck) and a big hole in the floor (of the truck this time) with a whole bunch of hoses, wires, and linkages going nowhere. This was actually worse than starting with an original truck since I had to undo all of the previous damage: engine mounts (rickety arms bolted to the floor and frame) transmission mount (passenger car crossmember mounted to the bed sheetmetal with four, foot long lengths of all-thread) and linkages (boat cables for the floor shifter on the front of the engine box and for the throttle linkage.) The only things I kept were the engine itself, the cherry-bomb glass-pak mufflers, and the extension panels for the sides of the engine box which had been nicely done in galvanized sheet metal by a heating shop. I could only take the previous owner's word that the setup actually ran and drove - there was no way I was going to drive the thing after looking underneath. From the beginning I had my heart set on a manual transmission, so I pitched the C4 automatic in the trash (wouldn't come out of park so I had to pull the driveshaft to tow it home (with a flat tire in the rain)) and bought a 1962 phone company van, that had been rolled, for "parts". The next thing I

learned was that the 1962 transmission would not work on the V8. The clutch parts wouldn't work either and everything else was worn out or missing. I sold the 200 engine out of the parts van to pay for it and scrapped the rest. Got a good battery out of the deal, though. (Also later traded the '62 transmission for a heavy duty rear axle so didn't come out too bad.) Went down to the local wrecking yard and dug around under the Econolines and ended up with the 3 speed transmission from a 240 equipped 1967. Also bought a bellhousing and flywheel for the V8 as well as the 240 engine crossmember and clutch bellcrank. This was in the middle of winter and served to convince friends and neighbors that I was truly crazy, coming back every evening covered in mud and grease and laying under the truck every day, rain or shine, just looking at things trying to figure out how to make it work. Of course I had no garage. My driveway was sloped sideways enough to make all the water run under the truck and and to make all the tools and loose parts roll into the weeds and get lost.

To mount the crossmember I bolted it to the holes on the inside of the frame where the original engine mount arms went. I cut holes in the sides of the frame, large enough to slide some drilled and tapped plates through which two pieces of angle iron bolted to from outside, sandwiching the outer sides of the frame. I bolted the outer crossmember mounts to these angle plates. (I drove the truck for a couple of months with only the inner pads in place and had no problems but recommend mounting the outer ends as well to make it really strong.) I finally got the crossmember bolted in place and realized that with any of the engine mounts I could find, the engine would sit way too high. I went down and bought some flat bar and half inch rubber sheet and bent up some engine mounts (tore the vise right off the workbench, so built a stronger workbench somewhere in the process.), put the rubber in for a cushion, and ran a half inch bolt through the plate, rubber, and crossmember to hold the engine in place. I'd like to see that engine go anywhere. I bolted up the flywheel, clutch, bellhousing, and stuck the transmission on to see where it needed to mount. A bit of angle iron, some bolts, and some more rubber sheet made for a transmission mount. I eyeballed the driveshaft angle, took a few measurements, and had the driveshaft made up from the front half of the 240 one and the back half of the original. I had the original light duty axle in there at the time and decided to go with it for a while, despite the fact that a good portion of the yoke had broken off when the previous owner had hit a bump and his shortened Mustang driveshaft hit the limit of it's angular travel and popped out of the yoke. A word to the wise here about shortening driveshafts and expecting them to work through a larger angle than they originally did: don't!

I finished up by connecting the various wiring and hoses where I thought they went, put in some gas and other vital fluids, crossed my fingers and turned the key. The first sound I heard was the rear mounted electric fuel pump. So far, so good. This was followed by the carburetor flooding over and dousing the engine in gas. A few raps with a screwdriver handle fixed this problem, so I hit the starter. The starter spun, just fine in fact, but the engine didn't. I pulled it off and looked in the hole and saw that there was no way that the starter could reach the flywheel teeth. With hopes of finding the right starter, I spent half a day hopping from parts store to parts store but no such luck. Turns out that I had the wrong bellhousing for the flywheel (or vice-versa). The wrecking yards I called all said they had the right bellhousing, so of course when I went there none of them did. I ended up driving farther and farther out of town. The last yard also produced nothing until one of the employees overheard me bitching as I was leaving. Turns out he built Mustangs and was the first person I'd talked to all day that knew that they weren't all the same. Seems that the Mustang/Cougar/Fairlane used a smaller flywheel than the rest of the Ford line and I had, by chance, gotten one of those. He told me to go look in the bus in the back corner under the pile of hubcaps as he had hidden one there several months back. Sure enough, it was there. Problem solved.

With everything back together, the engine started, the truck drove, and all seemed well. About a week later the clutch rod broke where it goes through the pedal.

The skimpy little Ford rod was never made to live in front of a V8 clutch. A length of 5/16 inch rod and some Heim links fixed that real quick. With all the immediate problems fixed, the truck was officially deemed roadworthy. There was no problem at all laying down forty feet of rubber with both back tires but the engine was wound out by 70 MPH.

The first attempt at a throttle linkage was a boat cable which went from the original pedal shaft to the carburetor and worked in the "push" mode. Drove it for a couple of months like that but was not happy with it since the throttle was either on or off. The second attempt was to use a boat cable in the "pull" mode with a bellcrank that ran around the back of the carb. The first time I drove it, the bellcrank over-centered and floored the pedal. I got mad and tore out the whole mess and smashed it. Anybody who's known me for a while will understand (eds note: with Jay, the emotions "mad" and "urge to pound into oblivion" are one and the same). The third and final version used the cable setup from the 1965-67 240. I shortened the cable by about ten inches and bolted it to a modified clamp also from the 240. This pulls on a ball stud which is mounted to the carburetor below the centerline of the shaft. This gives a very smooth and controllable throttle which I am very happy with.

The first road trip showed up no real problems, and the gas mileage was better than 20 despite the rear end ratio. I drove it a while longer and took it to L.A. to see what it would do. By the time I got there there was a slight knocking in the driveline but not too bad. By the time I got back, the rear U-joint (still light duty) was slapping around pretty badly. I threw a new one in and started looking for a heavy duty axle. Finally found a crazy guy in town who was cutting up a '64 heavy duty in his front yard. Ended up trading a bunch of parts and drooling over his mid-engine V8 '64 van that was sitting in the garage. Ended up spending more time under his van than mine in no time at all, but that's another story. Got the 9 inch axle installed for the cost of brake parts, had another driveshaft made up and things were happy. I aligned the driveshaft correctly this time (I had made the transmission mount adjustable, more through laziness than foresight.) and was on the road again. With the 3.00 ratio the tire life was extended considerably and gas mileage was 23-24 mpg until the 4 barrel showed up on the scene.

The exhaust system is a Y-pipe from a Torino (1970?) which I split and clamped some freebie mufflers onto. This replaced the burnt-out cherry-bombs which I tolerated for a year or so.

Somewhere about here I replaced the marginal small six radiator (the three core one worked fairly well except when sitting still, the four core I had custom made boiled every forty miles on the freeway) with the one from a 240. The fan is a flexy one from a Ford car 351. Cooling problems officially over. The next weak point was the brakes. I managed to overheat and warp three front drums in six months so it was time for the discs. Since then, it's been over four years and 55,000 miles and no additional problems.

What would I do differently now? First, I would look for a truck that someone had not messed with. Preferably a 1965 or later since the crossmember mounts are already there and preferably the 240 equipped one so I could use the existing transmission and linkages. The ideal truck would be a 1965-67 (crossmember mounts, correct transmission mount, dual master cylinder in the 1967) Heavy-duty (stronger frame and springs and 9 inch axle) with the 240 engine (correct transmission either stick or automatic, cable throttle). I would use the 170 crossmember so the stock, stud-type engine mounts would bolt in. I would use the 1968-70 Chevy van engine box (sure like all the room under Brian's) and I would have a garage and all the right tools to do it with. Keep in mind I had absolutely no welding done except the driveshaft and didn't have an engine hoist or even a decent jack to move things with. For gas mileage I would put the two-barrel back on. Sure ran good with it and started easy, but I like to kick in the secondaries every so-often and I still get 20 or so MPG on the highway if I keep it below 70. I still need to insulate the engine box, more for noise than heat. I never did put in the stupid resistor to kick in the voltage regulator so I rev it every time I start the motor. I still plan to put in the heavier front springs to handle the extra weight of the V8 and hope to get a

heavier front sway bar made up. I also plan to install a "real" exhaust system that runs all the way back with quiet mufflers. The Turbo's beat your ears up!

What wouldn't I change? I am very happy with the V8 in general, and the 289 in particular. The power and gas mileage are both up from the six and it has been pretty reliable. The 240 radiator cools things just fine as long as it's kept full. The throttle linkage is the best I've driven, in fact better than the same setup on the 240 six that it came on. The 9-inch axle with 3.00 gears and 235R60-14 tires gives about 3000 RPM at 70 MPH and is about right for combined city/highway driving. The disc brakes work flawlessly, and to me were a "must" with the V8. For someone who doesn't push it, the drums are OK but I'm much more comfortable knowing I can't fade the brakes, and believe me, I've tried.

Summary:

Engine: 1967 289 2-barrel (9.3:1 compression) motor with 4-barrel intake and Autolite 4300 Carb, stock exhaust manifolds, ported heads, rear-mounted electric fuel pump.
Engine Mounting: homemade mounts on 1965-67 Econoline 240 crossmember
Transmission: 1967 Econoline 240 3 speed manual (Model 3.03), stock column shifter
Transmission Mount: Homemade
Driveshaft: 1965-67 Econoline 240 stick lengthened 3/4 inch
Rear axle: 1964 Econoline 9 inch Heavy-duty with 3.00:1 gears
Bellhousing/Flywheel: 1967 Mustang with Hays 10 inch clutch
Radiator: 1965-67 Econoline 240 with Ford LTD flex fan, molded hoses
Throttle Linkage: 1965-67 Econoline 240, cable shortened 10 inches
Exhaust: Split Torino Y-pipe with Turbo mufflers, exits in front of axle
Brakes: Front are 1966 Mustang discs with 1967 Econoline dual master cylinder, residual pressure valve removed from front circuit and 1969 Mustang proportioning valve in line to the rear. Rear are heavy duty 10X2.5 inch from 1964-67 Econoline.

Brian's, by Brian. After reading, editing, and mulling over Jay's story of the V8 installation into his pickup, I quickly realized that the story of his and the story of mine are almost opposites. Right from the beginning, a) I was starting with a stock, never drastically messed with van (versus pickup), b) I had seen several V8/Econoline swaps and, although I didn't have any experience at engine swapping and/or fabrication, I had the benefit of help and advice from someone who had already done it: Jay, c) I threw away a manual transmission and used an automatic, d) I collected parts for months before I started the job so my down time would be minimal, e) I had a garage (though not tall enough for the van, so I made a tarp tent over the van), a level driveway , and a borrowed engine hoist, and finally f) there was a lot less frustration, cursing, tool throwing, etc., in part due to the difference in our temperaments, but in a larger part due to the knowledge that Jay had acquired since doing his.

The story starts with my 1963 standard van with a main bearing rattle, a continuing exhaust leak, a recalcitrant manual transmission shift linkage, and the third light duty rear end that winds out at 60 mph. The only "improvements" had been the complete stem to stern re-wiring job I had Jay do, the change to heavy duty springs and sway bar with KYB gas-adjust shocks. I had pulled out the panelling that was in the van before I had Jay re-wire to make things easier for him. My then new job was of a nature that I had long, hard days on for two weeks, then two weeks off. I was also starting to put away some money , and had recently moved to San Leandro, home of Jay Long, Dr. Econo himself. I had purchased a 1964 C4 automatic and column from Jay about a year before (Jay got it from the crazy guy torching the same '64 in his yard, (see above; we'll have to print that story one day), and had dragged it through two moves since. Conditions were

ripe when, one day, Jay calls me and informed me that a beautiful 1963 van, with 302 V8, automatic, heavy duty rear axle, wonderfully straight body (I'd seen pictures; Jay had seen the truck) had been smashed. Bummer. It had been a truly beautiful truck, but the impact of the Pinto that had fish-tailed around the corner and over-corrected straight into the driver's corner of the truck, had been sufficient to break the king pin...on the passenger side. The guy had convinced his insurance company to fork over $4000 bucks (it was a really nice van and he got a few estimates to get it fixed). He bought a Harley for $4500 and decided he really didn't have the time or motivation to repair the van and was selling it for $600. Jay asked if I was interested. I replied that I wasn't $600 worth of interested, but was interested. A few weeks later, we discussed it again since it was still for sale. Jay was interested for the body and I was interested for the running gear, but neither of us had a place to put it. A phone call took care of that; we bought the van two days later. I started amassing parts more seriously.

The wrecked van had most of what I needed. The engine, the trans torque converter, bellhousing, starter, rear axle, radiator, and exhaust were all there and in good shape. I dug a 170 crossmember out of a junkyard, as well as the '65-'67 pedal bellcrank, a '69-'74 Econoline six cylinder throttle cable, and some other assorted small pieces. Jay copped a Chevy van engine box from a co-worker of his that was getting rid of the van. The box was kind of beat up, but the price was right and it was good enough to see if that was the way I wanted to go. Everything was finally coming together.

One day in November I had most every thing together enough, so I started taking things apart. First I swapped the light-duty rear axle for the heavy one, so the truck wouldn't be on jackstands during the engine change. I removed all the six-cylinder, manual transmission stuff from the steering column to the driveshaft, including the engine box. I put the 170 crossmember into the two stock frame brackets, and like Jay sort-of did, cut slots into the frame through the floor to slide some drilled, tapped pieces of bar into. These bolted to the piece of angle iron that made up the outer bracket. Now that I could see where the motor would sit on the pads, I placed the Chevy engine box over the opening, centered it over where the motor would be, and traced around the inside bottom of the box. Out came a borrowed Sawzall, and moments later, I had a lot more room to work with. Since I planned to use the stock radiator I had to cut an angle back into the original engine opening where the bulkhead bolts to the radiator mounting bracket. I covered the holes in the floor that I made when I put the outer crossmember brackets on with a piece of floor I had just removed. The stock Ford stud type motor mounts don't quite go straight into the 170 crossmember, so I had to position the motor, mark the pads, pull the crossmember and open the holes up. Good grinding equipment is recommended here. I didn't have any, so it took me a while. Once the motor would sit in the pads on the crossmember, I took the small six stuff off the 1964 C4 I got from Jay, bolted the bellhousing and torque converter from the parts truck to it, put the whole mess on the engine and again lowered everything into place. The trade-off of using the stock engine location is that you must make the transmission mount. I made things easy on myself by using the '64 tranny since the tailhousing on that year transmission has the doughnut type single bolt hanger. I almost got away with a bolt in installation here too, except the V8 is shorter than the six, putting the hanger about 2" forward of the stock mount hole in the small extension from the frame of the truck. Just so happens that is the forward end of said same extension, and since I can't usually drill half a hole and get it to work I had to rip out the extension, and make a new transmission hanger mount slightly forward, once again using two pieces of angle iron secured to a plate above the floor. Be warned: that mount/extension on the frame is no easy item to get out, especially with a Sawzall. A torch or an air chisel would probably be easier to use. I used sheet rubber to take up the space created by the ridges in the floor so I wouldn't crush the floor.

Once that was done, I measured for the driveshaft and got that started at the driveline shop, bought shims for the rear axle at a suspension shop, and started the

downhill part of the job. The automatic column bolted in ('64 and '63 columns are the same). I put the radiator in and the nice lady at the local, real auto parts store waded through the drawings and measurements of the parts book to find some molded hoses that would fit. She found some and I put those on. The auxiliary transmission cooler that that I got from somewhere I mounted under the front floor so it would get some air. Put the exhausts that came with the parts truck in after hemming and hawing about whether to put the headers on. Went to mount the starter and the you're-not-going-to-finish-that-easily gremlins returned. Not enough clearance between the bellhousing and the crossmember. I filed and cursed. I filed and ground with a bit in a drill and cursed. I filed and ground with a bit in a drill and Sawzall-ed and cursed. I finally had a big enough notch in the crossmember that the starter with the short case (in later T Birds) would fit so I traded Jay my starter with the larger end for his with the smaller end and he still hasn't forgiven me. I put the engine box down with sheet metal screws and silicone after first closing the front of it with a piece I cut from the old Ford box front. I attached it with more sheet metal screws and silicone. I attached the rest of the hoses, kickdowns, linkages etc. Found out that the 240 automatic shift rod was too long, so I had to use one of the shorter manual shift rods. Had Jay hook up the wiring, filled up the fluids, and we turned the key. Music. True music to my ears. The carb was a little rough, especially cold, but the motor sounded wonderful. Quickly, I cleaned up the giant mess I made over the two weeks, bolted in the driveshaft, slapped the seats back in with the two outside bolts (would worry about mounting to the box later), put the lid on the engine box and went for a drive. Again, absolutely wonderful. The trans and the carb were a little squirrelly, but everything else was great.

Great for two weeks. One day I punched it (I'd learned to enjoy this) to get out of a driveway and into traffic with a blind crest of a hill 50 yards away. Too much punch. I felt a thump, and heard the sounds of something repeatedly scraping the radiator fins. At the top of the hill I shut it off and coasted onto a side street to investigate. After the steam cleared when I opened the box, I surveyed the damages. One broken motor mount, caused one fan (and water pump shaft I later found) to bend when it hit the radiator brace, which came down and sliced a nice circle into the radiator. Oh well,I had planned to go to the 240 automatic radiator anyway. I had also planned to go to some heavy-duty motor mounts used on later Ford trucks and vans that had a steel rivet through them to stop from happening exactly what just happened to me. After I had been back on the road for a month or so, I was inspecting the mounts to see how they were holding up. I didn't feel like forking out for another radiator and fan and pump. Not only were they starting to pull apart, the rivets were starting to fail. Something needed done. Dr. Econo said to pull them apart (easier said than done), pull out the rivet and stud, and drill a hole through them to run a grade 8, 1/2" bolt through. I did it (we did it). A rougher ride was the result, and a hard two years later the mounts are still doing their job.

A later addition was the installation of headers. Most small Ford headers turn in towards the transmission. There must be something about Mustang and/or Cougar frames that don't let them go straight back. Anyway, I found some that didn't turn as much, and I still had to have a friend (remember that crazy guy cutting up a van?) bend them out and up to fit the van. They have to clear the crossmember as well, and putting the starter in gets really interesting. They hang low, even after bending, so I wouldn't think of putting them on a lowered van. Lastly, one has to bend the shift rod so it won't rub the headers. I had a local exhaust shop bend up the rest of the exhaust system. Another later addition were the front disc brakes like Jay used. I figured with more go, I better have more stop. It's been worth it, in spite of the prices commanded these days for Mustang gear.

There is nothing major that I would do differently if I were to do the job over. I may think about using a heavy-duty model truck to get the thicker frame. Jay has had problems with his light-duty because a friend put his up a curb (twice) and cracked the frame (not to mention my long-sought-after tinted windshield! JL). If I were to put in

anything more potent than a stock 289 or 302, definitely the heavy-duty would be the way to go. Otherwise I would, and plan to, change three things. 1) Late model Ford two barrel carb automatic chokes don't cut it. I've had two, and neither one has run worth a tinker's damn. Manual choke as used in Ford trucks, OK; early '60's two barrel, OK. I'm going to the 4 barrel setup, hoping to be rid of the choke problems, and to help the truck on top end since it'll see mostly open highway use anyway. 2) The 240 radiator setup works for Jay. Mine doesn't, but that's because the radiator is a turkey. I'm planning to go with the Chevy crossflow radiator that Chevy used in the cab-forward V8 vans. 3) If you don't get the throttle cable mount low enough, the throttle still wants to pull over center, making smooth acceleration from a stop difficult. Such is the case with mine. My remedy is going to be to use the mechanical linkage used by Ford on the '68-'72 vans that bolted to the head, and use a cable to activate that. I may do a tech article on the radiator and throttle linkage when I get them done.

Ford really should have made a V8 option for these trucks. Whether they would have done a better or worse job than we have done is open to debate. In a way I'm glad Ford didn't because everyone may have piled their Econolines into telephone poles; in a way I wish they would have because they probably would have sold lots more of them and there'd be more for us to play with. With the advantages of power, mileage, and fun, I'd do it all over again in a second if an opportunity presented itself.

Summary:

Engine: 1968 302 2-barrel (9:1 compression) motor with a 1970 or so 2 barrel carburetor, header exhaust.
Engine Mounting: modified stock stud-type mounts on 1965-67 Econoline 170 crossmember
Transmission: 1964 Econoline C4 automatic with V8 bellhousing and torque converter,
stock column shifter
Transmission Mount: Homemade
Driveshaft: 1965-67 Econoline 240 automatic; length = 26 1/8 inches
Rear axle: 1964-67 Econoline 9 inch Heavy-duty with 3.00:1 gears
Bellhousing/ Torque Converter: 1968 Ford 302
Radiator: 1965-67 Econoline 240 with aftermarket 17" steel flex fan, molded hoses
Throttle Linkage: 1965-67 Econoline 240 cable type, with 1969-74 Econoline cable
Exhaust: exhaust shop fabricated with Turbo mufflers, exits in behind axle, to sides
Brakes: Front are 1967 Mustang discs with 1967 Econoline dual master cylinder, residual pressure valve removed from front circuit and early Mustang adjustable proportioning valve in line to the rear. Rear are heavy duty 10X2.5 inch from 1964-67 Econoline.

Adventuring in the Night-Sea Journey, Part 1

by Tony Smith

This past May, against the wiser judgements of friends and family, I took to the highway heading north towards the California border, hoping to make southern Oregon or, otherwise, parts unknown. This was a maiden voyage, solo, in my recently acquired '64 Travelwagon camper dubbed "The Night-Sea Journey". After a great deal of repair work, my day came , I loaded up, said good-bye to my wife and drove into the night. I remember the night as cold and windy, like so many others spent here on the east side of San Francisco Bay. Around this territory, time passes in a blur, lives evolve rapidly, yet for me, the urge to hit the road always returns, like a persistent, sometimes-welcome relative. The feeling is expressed in the song "I'm older now, but still running against the wind". The star of this journey, my Travelwagon, has had a distinguished history

just from the bits I've pieced together. It was pressed into duty at one time or another as a courier vehicle, commuter bus, illicit drug dispensary, home for homeless--why someone probably even used it for camping! I found it on three flat tires, stuck in the mud... but that's another story.

The Travelwagon was a factory authorized camper conversion of the Ford Econoline/Falcon window van, performed by Travel Equipment Corp of Elkhart, Indiana. I've seen the conversion on models as early as 1962 and up to 1964, (eds. note: I took the top out of a 1966. Jay and I haven't seen a '61 or '67 yet.) though I don't know the full duration of production. The centerpiece of the the conversion is an all-metal pop-top that articulates upward either as a flat sided dome or as a rectangular walled unit, depending on the model year. The conversion offered up to three interior canvas cots, (2 adult, 1 child) ingeniously offset at different positions and levels to best exploit the available interior room. With the cots rolled up in their storage slots and the top up, it is possible to walk upright through most of the interior. There is a dinette that seats four and lowers into a bed sleeping 1-2 people. There is a pantry cabinet, with storage and a sink. The water system features both a manual pump with a storage tank and a pressurized faucet for hookup to an outside water source. There is a 110VAC exterior hookup with an interior outlet plus a 12VDC transformer linked to the van's lighting system. There is another cabinet containing the ice-box, topped by a sheet metal lined enclosure that accommodates a portable camp stove of your choice. The vans are filled with storage and detail work.. All the attention to function and detail makes you feel pampered in middle of the outdoors!

Mechanically, Travelwagons are pretty much identical to the standard van with comparable performance. My particular van is equipped with the 170 cid engine, optional Dagenham 4-speed transmission, and a heavy-duty axle with 3.28 gearing. I installed the axle as a replacement for the standard light-duty unit that was worn out when I got the van. On the highway with this combination, I cruise at 68 mph which yields 20 mpg! In the mountains of northern California though, I must share the far right lane with my dieselized, semi-truck brethren. A planned change to the 200 cid engine and, if necessary, a new set of axle gears, should correct my mountain driving woes. On the highway, the pop-top, which extends almost 4" above the roof line, doesn't seem to affect the stability. At home, the van is low enough to squeeze inside my garage.

The old saying, "They don't make them like they used to" really fits the Travelwagon. The package offered the necessities for motorized camping without the tremendous weight and complexity of later conversions. The interiors are comfortable and functional, though they become somewhat cold, due to all the exposed metal surfaces. My suggestion for correction of this problem is the addition of the :"Club Wagon" fiberglass interior trim panels and complete insulation of the body. Two of the Club Wagon panels require minor cutting in order to fit in along with the Travelwagon interior. These additions to the Travelwagon add up to a pleasing yet durable package. Travelling throughout California, I've run into several of these vans still in frequent use .

On my maiden voyage, I made it to southern Oregon and back almost without a hitch. My only problem was that the number one cylinder developed a voracious appetite for oil. I'd "stop for oil and check the gas" (it wasn't quite that bad, but it confirmed my idea about changing to another (and bigger) engine).

I spent a week in the Rogue River Valley camping at the exceptional Rogue River State Campground. For the uninitiated, the Oregon state park system is an excellent, deserving, and apparently big beneficiary of the Oregon tax revenues. Rogue River Campground is one of the primary "home away from home" refuges for avid campers, especially those retirees that frequently criss-cross the country on their own private sojourns. The Rogue River area encompasses the towns of Ashland, home of one of the major American Shakesperian festivals, Jacksonville, a fascinating historic landmark town, and Rogue River itself, home to rafting, fishing, and recreation. The cities of

Medford and Grants Pass are also in the Rogue River valley. My next big pipe dream finds me and "the Night-Sea Journey" in the mid-western U.S. during the late spring or early summer of 1988. If there are any mid-western members that wish to see 'the Night-Sea Journey" and hear of its adventures, drop me a card. Who knows what's possible, running against the wind.

Roster Additions

This is basicallly just to let you know who has joined us since last issue. There's a complete roster tacked onto the end of the newsletter,

Eric Abraham 747 Santa Fe Drive Denver, CO 80204 (303) 573 - 5903	1963 Regular Van 1966 Regular Van, Extended	
Galen Chaney 74 1/2 Devonshire Ave. Mountian View, CA 94043 (415) 961- 5360	1964 3-Window Pickup	
Walter Fletcher 6130 Monterey Highway, #202 San Jose, CA 95138 (408) 226 - 1374	1965 Window Van	
John McKay 287 Smith Ave. Hermitage, PA 16148	1962 Regular Van	289 V8, auto, custom paint

Econoline Classifieds

For Sale:
'65 Deluxe 5-Window Pickup. Very solid over-all condition, but needs paint. Original color is code "3", Poppy Red. It is equipped with spinner hubcaps, padded dash and has a new tailgate, front mat and newly upholstered seats. Near new radials, current license, and runs/drives well. Extra padded dash, right door and misc.. $1,500, or trade for '46-'54 Plymouth Coupe. Elmer Drennon, 12032 Midway Drive, Tracy, CA 95376. (209) 835-4178.

For sale:
170 cid small six engine, 3-speed manual trans, clutch pedal and shift rods from a 1965 Econoline. Cheap!! to anyone who can use it. William K. Williams, 6065 15 St.N., St. Petersburg, FL 33703 (813) 527-1439.

Wanted or Trade:
1964 C4 automatic and rest of setup for Econoline small six with doughnut type hanger on tailhousing. Will trade Dagenham full setup for it. Tony Smith, 2224 7th. Ave., Oakland, CA 94606 ,(415) 836-0340.

Wanted:
Four rear seat retainers and "T" bolts, rear floor mat, and good cond. Deluxe Club Wagon (blue) upholstery panels. Don English, 301 Alameda, Coronado, CA 92118