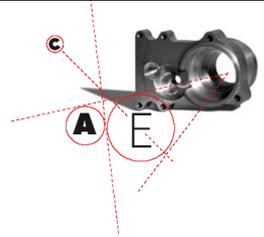


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WM-FORD-32-34-CD

Ford 32-34 Cable Wiper Kit Customer Instructions

Component List

Wiper Motor Assembly with Flexible Drive Cable (100 Deg Sweep, 900mm Flexible Cable (2500mm cable for above screen applications). & Bundy Tubes.
Wiper Mounting Bracket, U Clamp, Rubber and bolts, washers and nuts.
Two Wheel boxes, gasket, spacers and chrome bezel and nut
Wiring Loom, Switch and In Line Fuse.
Customer Instruction Sheet

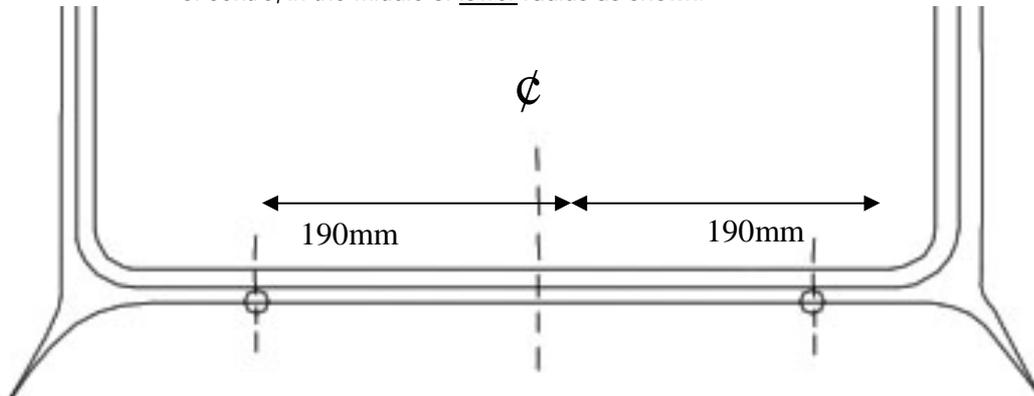
Tubing used is standard 5/16 Steel Brake tubing. (Bundy Tubing) Do not kink these tubes as serious damage to the wiper motor will occur. **Kink or dented tube must be replaced.** Some gentle bending can be done in a standard tube bender tool to give a better fitment to the cable drive. When bending fit cable in tube this helps keep its shape.

Fitting Instructions

Cable Driven Wiper Kit

- Note: Location of the Wheel boxes.-- Drill 16mm clearance hole at the correct angle to give the pressure on the blades. (Should be as close to 90 degrees to the windscreen glass as possible.)

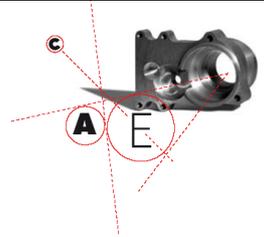
Locate and mark the centre of cowl windscreen opening width, measure out 190mm each side of centre, in the middle of lower radius as shown.



- Drill the two 6mm mounting bracket holes in the Door Pillar reinforcing channel and mount the wiper motor with its clamp and pad. Mark the position of the wheel box mounting holes. Once you have marked the wheelbox mounting holes drill a 6mm pilot hole and recheck your measurements. Drill out pilot hole to 16mm. Mount the Wheelboxes with angle spacer, gasket and chrome bezel, adjust the outer and inner nuts to get the right height for the wiper arm knurl, protruding from the body. For correct wiper arm operation the tube and flex cable run on the bottom side of the Drivers side wheel box gear and the cable and tube run on the top of the Passengers side wheelbox. This arrangement will have the arm both parked in the center bottom or top of the windscreen. Measure and cut the first tube. For below screen applications the tube will be shorter than the above screen application as it has to go up through the windscreen pillar and across to the first wheelbox. Use gradual bends to get it into position and fit brass nut and flare the cut end. Next measure and cut the Center tube to size and flare both ends. For the last tube use off cut to make approx. 120mm tube and flare one end. Fit to last wheelbox. Measure the overall length of the Tubing and cut the cable to length with an angle grinder fitted with a cutting disk. Remove the wiper motor, Clean up the cut end of the cable with a grinder then Grease the flex cable with suitable grease and hand thread to the first wheel box, on to the second wheel box and attach the tube to the Wiper motor via the Brass nut only hand tighten at this stage. Check all the other fittings and tighten all the pipe clamps and brass nut.
Continued next page.

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- 3 Fit 2-speed switch in appropriate hole and install wiring loom supplied.
- 4 Connect Black wire to suitable earth location on the vehicle.
- 5 Connect Red feed wire to Fuse supplied and suitable Ignition 12V Feed Wire on Ignition Switch of vehicle. Activate the wiper motor and check for smoothness of operation. Retest wiper operation. Make sure the Bundy tubes allow for a quiet operation.
- 6 Fit original arm or new wiper arm and blades in the park position. It is necessary to cut the Arms and Blades to suit the Windscreen opening you have.
- 7 Activate power and check wipers for sweep and all body clearances.

Windscreen Wiper Systems ----- Some useful helps.

1. Motor

This is a two speed wiper motor, with self parking.

Make sure you use the correct bracket and strap with the rubber covering, and the motor is not touching any part of the vehicle body to eliminate noise.

2. Drive Gear

When the new motor arrives there is a threaded brass ferrule to take the first drive tube. There are a couple of gears to fit this motor with the number 100 or 130 which is stamped on the top round plate. This is giving the least amount of travel to the rack and wiper arms.

On the top of the gear plate where the number is stamped there is a drive peg welded in position. This is the only item which changes position throughout all the gears (e.g. welded in different positions on the top plate.). Obviously if this peg was welded to the centre of the plate there would be no travel at all, so the further the peg is positioned to the outer edge of the plate the more travel you get. With each gear come 2 washers and a circlip retains the gear in to the motor, always pack with grease in the gear area before refitting the top cover.

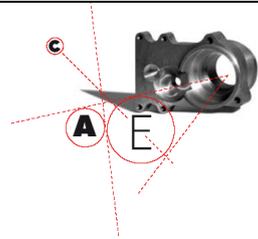
3. Wheel Boxes

The wheel box size is 32 teeth on the inner drive wheel and the ideal length of shaft from the inner face to the end of the splines is 2.5 inches. This allows for the thickness of material on fibreglass cars as the first spacer can be cut down in size allowing for varying thicknesses through the bulkhead where the wheel boxes fit.

If the car has a split screen then it is quite easy to fit what was called the clapped hands system. This is by turning one of the wheel boxes through 180 degrees.

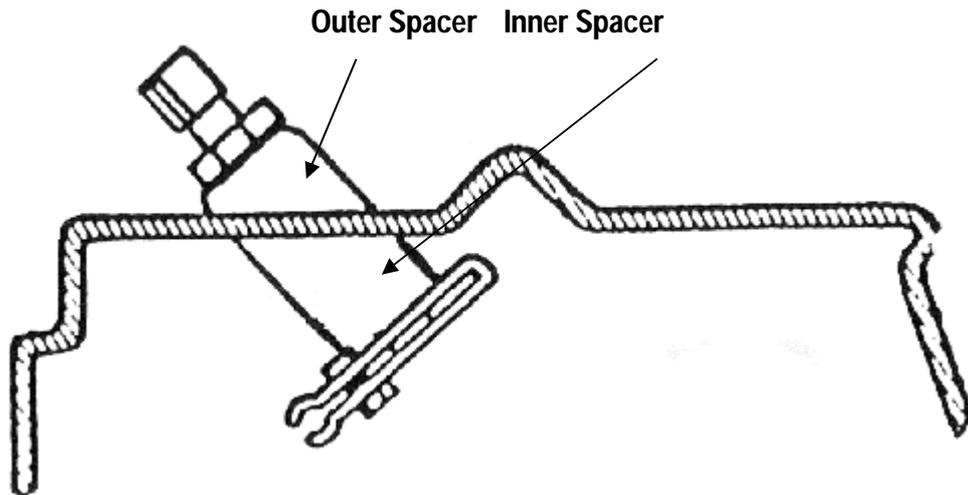
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Wheelbox showing inner and outer spacer which will require some radius work to suit individual shaped cowls



4. Drive Rack

When fitting a new system to a existing vehicle, it is advisable to fit a new drive rack as this is one of the items that wears, resulting in the wiper arms having too much play.

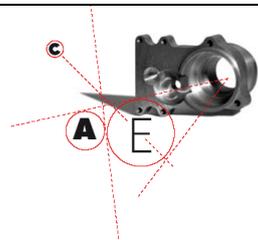
5. Drive or "Bundy" Tubing Sets

It is far better to use the recommended wiper tubing (5/16 Steel Brake Tube) than to use copper tube as this can be noisy and wears very quickly on any bends. Wear of the drive tube, sharp bends or kinks in the tube, causes friction that can lead to the motor burning out.

Bundy tube sets can be made up providing you give the supplier 2 dimensions. The first is the distance from the motor to the centre of the first wheel box hole, and the second the distance between the wheel box hole centres through the bulkhead. Obviously if there is a 3 wiper system then there is another dimension needed. Try to avoid sharp bends in the tubing, If you have to bend the bundy tube, an easy way to form the shape is to insert the drive rack into the tube before bending. This will keep the tube the correct diameter on any of the bends (very much like a plumber bends copper piping by inserting the spring). Always grease the rack liberally before inserting into the bundy tube.

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Fig 1: Drive Tube Dimensions

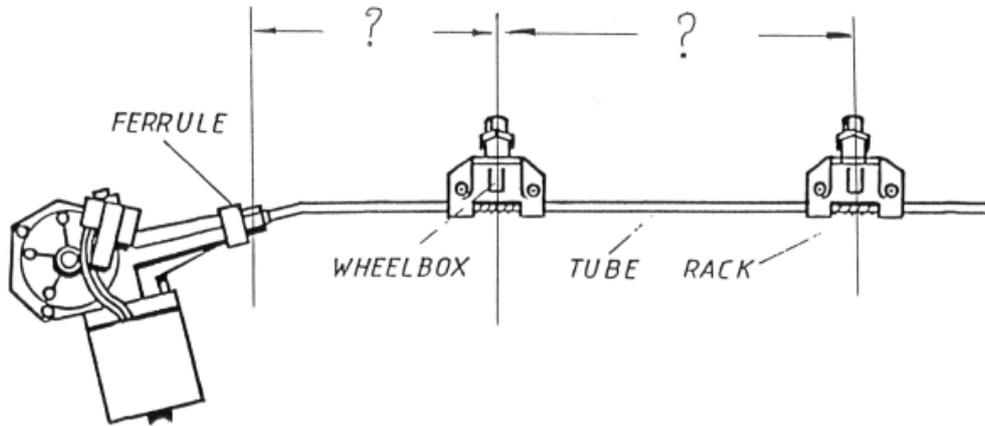
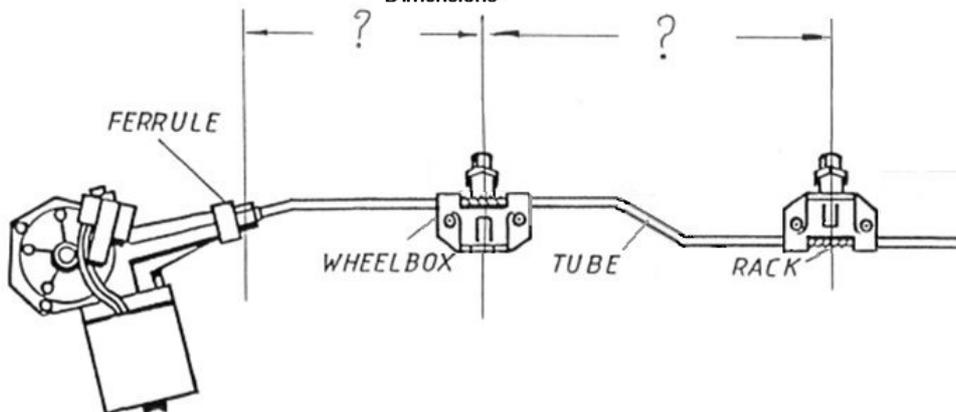


Fig 2:

Drive Tube Dimensions



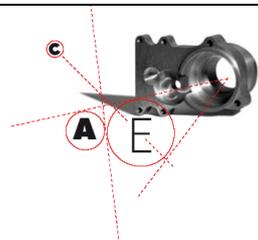
The above diagram (FIG 1) is for self parking to be either on the left or the right sides of the windscreen. To have center parking (FIG 2) one wheel box is fitted with bundy tubing running to the top of the wheel box. I.E. The wheel box is fitted upside down I.E turned 180 degrees. If the Wiper motor is mounted on the Passenger side then the R.H. Wheelbox is the one that needs to be fitted upside down.

6. Switch

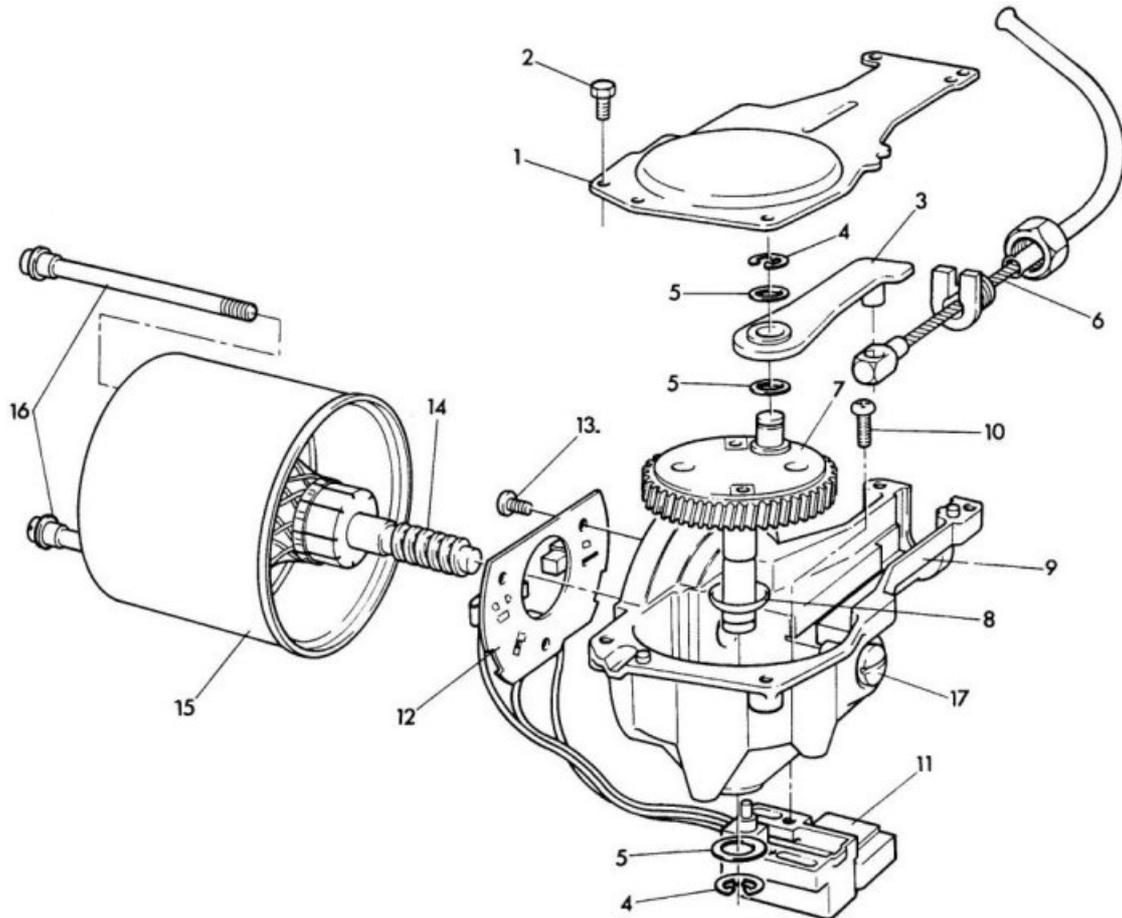
It is important that you use the correct wiper 2-speed switch as supplied. The reason for this is that when the switch is in the off position with the ignition switched on there is one connection which becomes live. This operates the parking position. If you use a non-live switch then the wipers would stop whenever the switch was switched off.

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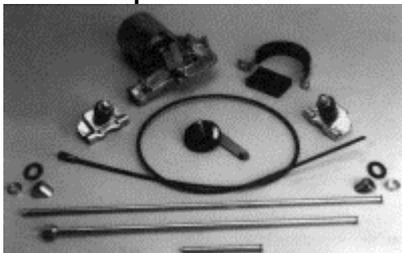


KEY:

- 1 Gearbox cover
- 2 Screw for cover
- 3 Connecting Rod
- 4 Circlip
- 5 Washers
- 6 Flexible wiper drive

- 7 Gear wheel with crankpin
- 8 Dished washer
- 9 Gearbox
- 10 Limit switch screw
- 11 Limit switch
- 12 Brush gear

- 13 Screw for brushes
- 14 Armature
- 15 Yoke
- 16 Bolts
- 17 Thrust screw



WIPER KITS

Made to your requirements



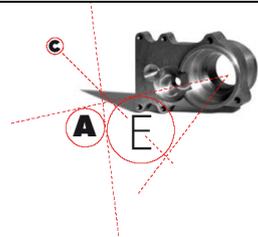
WASHER KIT ASSEMBLY 1.2 LITRES

Bottle & pump assembly, mounting bracket, push button switch, tube & a twin Jet.

\$44.00 inc gst

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WINDSCREEN WASH PUMP

\$20.00 inc gst

Drive Tube (correct material) Cut & flared.

No Charge

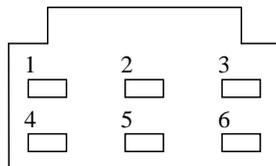
Wheelboxes

32 tooth gear wheel.3 1/4 inch drive shaft.

\$88:00 inc
gst

Wiper Motor Pin Outs.

Plugs viewed from the front not the wiring side

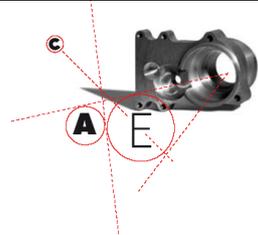


- 1) Black (Earth)
- 2) Green/Red (Low)
- 3) Blue/Red (Park)
- 4) Blank
- 5) Yellow/Blue (High)
- 6) Green/White (+ve)

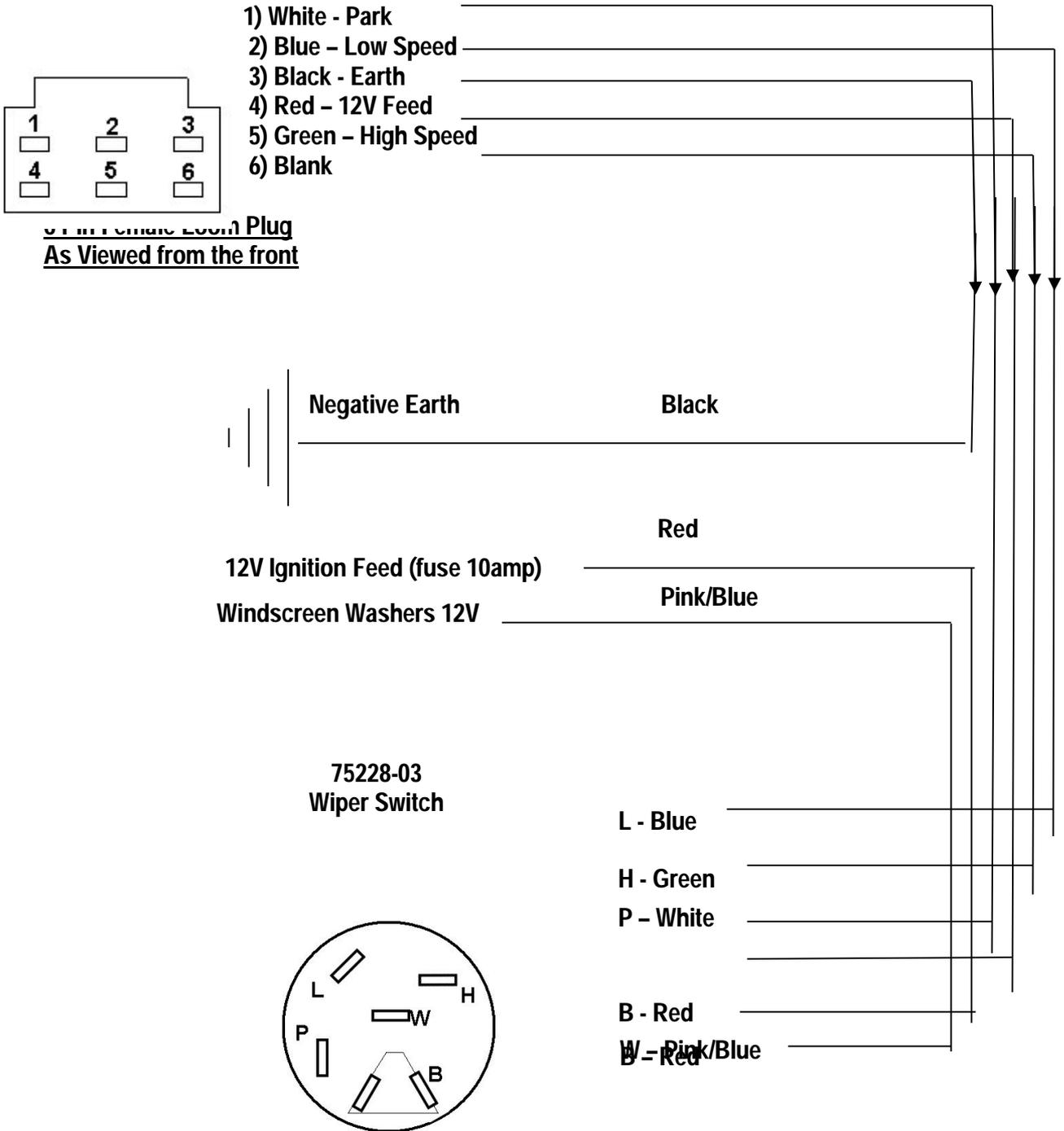
WIPER MOTOR LOOM PINOUTS

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Wiper switch system is 12V Positive Feed