# PERFORMANCE & SERVICE PARTS GUIDE

Merkur XR4ti / Sierra XR4i / Sierra RS Cosworth / Sierra RS 500 / Merkur Scorpio

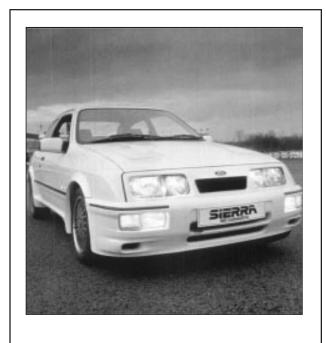




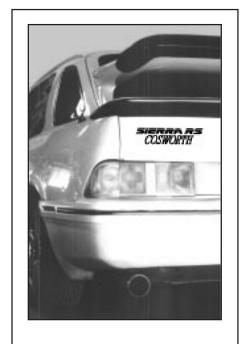
### **BAT** Inc.

British American Transfer Inc. 7630 Matoaka Road Sarasota, FL 34243 phone (941) 355-0005 fax (941) 355-4683 www.batinc.net

**BAT** is pleased to be able to offer this line of components for the U.S. specification Merkur XR4ti, Scorpio, and the other European models of Sierra lineage. European Sierra's have been manufactured since 1982 and include two versions or body styles. We will concern ourselves with the Mark 1, as it is more similar to the U.S. version. The most interesting of the MK1 series are the Sierra XR4i, Cosworth Sierra and R/ S 500 models. From the exterior the XR4i is most similar to our Merkur XR4Ti in overall appearance, however under the hood it is powered by a 2.8L V-6 engine, in place of the 2.3L 4 cylinder turbo. The most notable MK1 version is the Cosworth Sierra-one of the more outrageous vehicles Ford has ever offered. The Cosworth starts life as a base Sierra three door body shell, adds a high performance engine, suspension, transmission, and aerodynamics, making it one of the fastest 4 passenger road cars of it's time. Power comes from a 2.0L Cosworth Turbo YB series engine rated at 205 h.p. in its base form, and upwards of 550 h.p. in modified rally form. The R/S500 is a homologation outgrowth of the R/S Cosworth-basically a de-tuned race car in street trim. Later Sierra MK2 versions received a sheet metal



make over, but share most of the mechanicals of the MK1. Interesting MK2 Sierra's include the Sierra Sapphire Cosworth, and Sierra XR 4x4 - an advanced 4 wheel drive 4 door sedan. What all this Sierra history



means for us, is an abundance of specialized performance parts-many of which bolt-on to our U.S. specification Merkur. With this in mind Merkur owners can make an good vehicle even better. It is very amusing how much attention a Merkur that has been outfitted with Ford badges, Sierra logos and Cosworth grille commands, let alone a car equipped with the complete Cosworth body work!

**BAT** is a recognized Ford Motorsport USA and Ford Motorsport/Rallysport European dealer with over 30 years of experience of tuning European Ford automobiles. From Cortinas, Lotus Cars and Angliasduring the 60's, through the 70's- with Pinto and Capri, and into the 80's and 90's- with Fiesta, Escort and Merkur. Our expertise with building and racing 4 cylinder Ford powered cars includes Formula Ford, Formula Continental & Atlantic, SCCA Production, Showroom Stock, Auto-X, Improved Touring and Circle Track racing classes. We have a highly capable staff and you can confidently allow them to handle even your most difficult technical needs. Better still, our ability to buy in quantity, import products directly, and manufacturer speciality components assures you are getting the right parts at the right price.

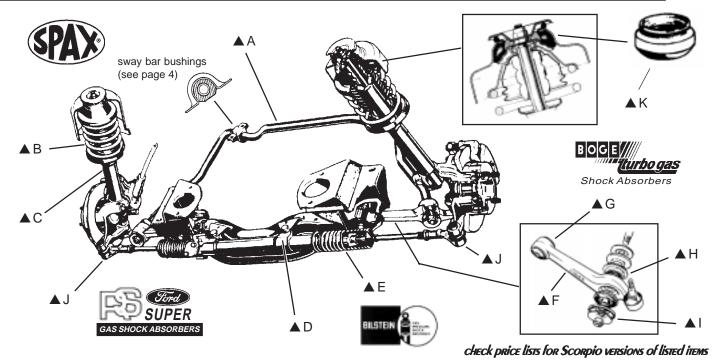
# Peter Thompson Eric Odenweller

and the staff at **BAT**Inc.

P.S. We have recently added a considerable number of parts for the Merkur Scorpio. Most of the XR4 items will have a Scorpio alternate available. See the price list for more information. You can also view and download updates to this catalog from our web site at www.batinc.net

# Suspension - (front)





▲ A *Front Sway Bar* The larger Cosworth Sierra 28.5mm factory front sway bar is a direct replacement for the standard 25mm bar. (H.D. bar clamp bushings are included) M407 NOTE: see price list for sway bar clamp bushings for XR & Scorpio

▲ B Spring Sets see page 3 (spring section) for listings

▲ C Front Struts (see below- shocks sold as each)

**Spax TA** series struts now utilize pressurized krypton gas with 10 positive settings (knob type external adjustment on top) for tuning the dampening to suit individual applications. **M401A** 

**Spax Sport** One of the most popular shocks we sell-Spax fixed rate krypton gas sport shocks are an excellent choice for upgrading the handling performance on the XR. **M401V** 

**Bilstein** New for 2004. Bilstein's new *T/C* series gas shocks offer the big B's renowned German made performance at a very attractive price. Bilstein shocks are now available in our suspension kits- see page 3 for details. Bilstein also make one of the few performance strut options available for the Scorpiosee price list under G401B. **M401B** 

Rally/Sport Super Gas made to European Ford spec. by Koni of Holland. R/S shocks feature Konis twin-tube low pressure design and have adjustable settings (knob type external adjustment on top) which can be tailored to suit individual applications.

M401RS

Boge Turbo Gas German manufactured twin tube high pressure gas design utilizing a unique variable valving system that insures the perfect balance between ride comfort and road holding capability. Also available for Scorpio- see price list

M401S

**KYB GR2** gas struts are high quality, heavy duty units at a cost effective price. Handling is improved without sacrificing ride quality. Also available for Scorpio- see price list

M401Y

▲ D *Steering Rack* complete rack assembly w/inner tie rods, boots, and stainless steel inner sleeve. **M434SR** 

▲ E *Rack Boot\** replacement steering rack boot **M434RB** \*same boot left or right XR4 & Scorpio

▲ F Front Control Arms higher mileage cars exhibiting ball joint and bushing wear can benefit from our standard control arms. These arms are brand new, and include ball joints and bushings installed. Note: the outboard (sway/control arm) bushing is an uprated "castellated" design which transmits less vibration than the original U.S. spec. bushing. (left) M428L (right) M428R

▲ G *Inner Control Arm Bushing H.D.* Made from increased durometer rubber, these heavy duty (GPN) bushings offer the desired firming effect while retaining a reasonable degree of shock and vibration absorption. (each) **M428BH-N** *Optional urethane version of above bushing* (set) **M428BU** 

▲ H <u>Control Arm/Sway Bar Bushing Kit</u> This heavy duty urethane bushing set really does an excellent job limiting the amount of "jutter" felt at the steering wheel which is especially noticeable under braking. The kit includes bushing halves and center sleeves to do both sides of the car and is easy to install. (set) M428BK

▲ H *Control Arm/Sway Bar Bushings* As an option to urethane bushings we offer either the "castellated" type outer TCA bushings are availablein standard rubber, or the new style (better fills the void between the bushing halves) H.D. GPN bushing kit. Both will dramatically reduce the vibration under braking common to XR's and Scorpio's. Outer TCA Bushings Standard (pair) *does 1 arm* M428B Outer TCA Bushing Set H.D. (set) M428BK-N

- ▲ I <u>Sway Bar Washer</u> Get the most from your new "castellated" type outer TCA bushings by using this "shallow" washer (in front behind the lock nut) for a tighter fit. **M407W**
- ▲ J *Tie Rod Ends* High quality European Ford standard replacement tie rod ends. (left) M434L (right) M434R

▲ K *Front Strut Upper Insulator H.D.* Made from increased durometer rubber, these heavy duty (GPN) Insulators offer the desired firming effect while retaining a reasonable degree of shock and vibration absorption. Steering and transitional response becomes noticeably more direct. (each) M404



# Suspension

# SPA)

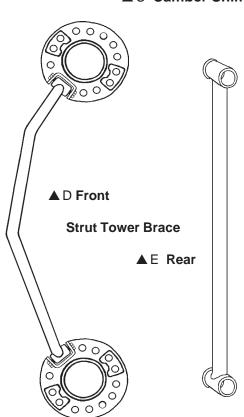
### ▲ A Suspension Packs



**▲** B Sport Spring Sets



**▲** C Camber Shims



### ▲ A Suspension Packages -XR4

Below is a listing of shock and spring packages available as engineered suspension packages. Fixed rate or adjustable shocks are supplied as noted. More information on the shocks that make up these kits is listed elsewhere in the front and rear suspension sections. Kits are available with either -25mm or standard ride height sport springs- your choice same price!

Spax Sport Gas Shocks & Sport Springs (-25mm or Standard) M400S \* supplied with fixed rate high performance gas shocks

Bilstein Gas Shocks & Sport Springs (-25mm or Standard)
\* supplied with fixed rate high performance gas shocks

M400B

Spax Sport Adjust Shocks & Sport Springs (-25mm or Std.) M400A
\* supplied with adjustable high performance gas shocks

### **▲** B **Sport Spring Sets -XR4**

Our specially designed progressive rate sport springs will minimize body "roll" while cornering and reduce "dive" under hard braking. Progressive springs are designed to become stiffer as they are compressed allowing for a smooth transition between (very reasonable) straight line comfort and high performance cornering. We recommend the standard height or -25mm ride height sets for all around performance street and light competition use. Take into account when lowering your cars ride height that additional negative camber will be added to the front and rear suspension angles. This is usually not a problem on the front end, however, cars that are already experiencing noticeable wear on the inside edges of the rear tires at "standard" ride height will see this increase when lowering. This condition can be corrected if necessary by using camber shims (kit available below) at the rear spindle mount to adjust for excessive negative camber. Notes: Defining "standard" ride height is difficult on the XR4 as the springs on many cars have already "sagged" 1/2 to 3/4 of an inch since new. In this case if the front and rear tires are still wearing normally lowering the car another 1/4" or 1/2" (over what it is currently) should not adversely effect tire wear.

Sport Spring Set -25mm (front & rear) XR M414M
Sport Spring Set\* Standard Height (front & rear) XR M414S
See Price List For Scorpio Spring Applications

### ▲ C Rear Camber Shim Kit -XR4

To correct rear camber angles on cars that have excessive negative camber we offer a handy rear spindle shim kit. This kit is sometimes necessary on cars with lowered sport springs, but can also be used to correct camber on cars with "sagging" stock rear springs. The components (instructions and shims) needed to space the rear bearing spindles between the brake backing plates are supplied. This camber kit will add roughly 1.5 degrees of positive camber and adjust rear toe back with in standard range as well.

M423R

### ▲ D Front Strut Tower Brace -XR4

The XR4 has a well built chassis structure that does not exhibit much flex under normal conditions. With the addition of high performance tires and suspension parts more stress is put on the front strut towers causing some deflection under hard cornering which will eventually weaken the structure and lead to unpredictable handling characteristics. Connecting the front strut towers by adding a upper stressbar (strut tie bar) will improve chassis stiffness and keep the suspension angles constant under hard use conditions. For this purpose we offer a lightweight aluminum front tower brace (stressbar) that incorporates a removable tubular cross brace and cast alloy turret mounts. Highly recommended for cars that are used for track events, drivers schools, auto-cross and spirited road use.

M403F

### ▲ E Rear Shock Mount Brace XR4

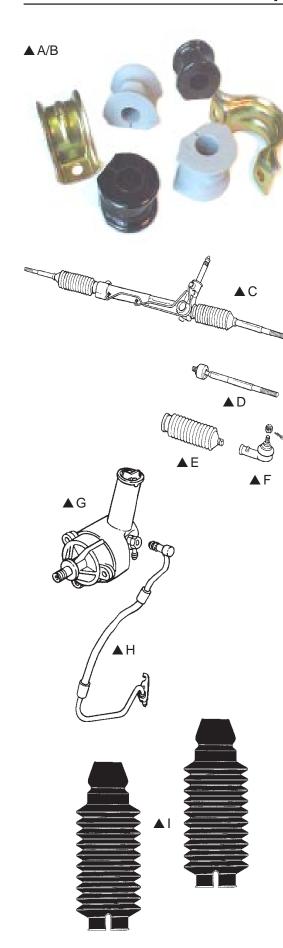
Our rear (stressbar) is a nicely finished lightweight tubular aluminum rear brace which is just the thing for linking left and right hand upper shock mounts. A slight bit of plastic trimming is required when fitting. Bars are supplied with an attractive blue finish.

M403R

(less expensive steel version of above) M403RS

# Suspension & Steering





▲ A *Sway Bar Bushings H.D.* Urethane sway bar bushings in 25mm for standard XR4 and 28mm for larger Sierra Cosworth or Scorpio sway bars. *Note: XR4Ti and Scorpio sway bar clamps differ slightly making the bushings non-interchangeable. XR'sthat require replacement bar clamps (see below) will then require Scorpio type bushings to match. (bushings sold each)* 

Bar Bushing H.D. 25mm- (direct fit) XR4 M407BU
Bar Bushing H.D. 28mm- (direct fit) XR4 M407BAU
Bar Bushing H.D. 28mm- (direct fit) Scorpio G407BAU

▲ B <u>Sway Bar Bushing Clamps</u> The European type sway bar bushing clamp (used on Scorpio & Cosworth) has a groove to receive a ridge back type bushing. Clamps are a direct replacement for Scorpio and can also be used to replace worn or broken clamps on XR4 with correct bushings (see above). (2) required-sold each

Sway Bar Bushing Clamp (each)- Scorpio

G407C

▲ C <u>Steering Rack</u> Complete ZF type rack assemblies include inner tie rods, boots, and stainless steel inner sleeve.

Steering Rack Assembly- XR4 M434SR Steering Rack Assembly- Scorpio G434SR

**Steering Rack Bushing** Standard and H.D. (urethane) rack bushings (2) required (sold each)

Steering Rack Bushing (each)- XR4 & Scorpio M434B
Steering Rack Bushing H.D (each)- XR4 & Scorpio M434BH

▲ D *Inner Tie Rod* High quality European Ford inner tie rods available for XR4 and Scorpio. (sold each)

Inner Tie Rod- XR4Ti M434TK
Inner Tie Rod- Scorpio (left & right same) G434TK

▲ E *Rack Boot* All rubber steering rack bellows (boots). Suitable for both XR4 and Scorpio. (*left & right rack boots same- sold each*)

Steering Rack Boot (each) -XR4 & Scorpio

▲ F <u>Outer Tie Rod End</u> High quality European Ford outer tie rod ends available for XR4 and Scorpio. (each)

Tie Rod End- XR4 (left) M434L
Tie Rod End- XR4 (right) M434R
Tie Rod End- Scorpio (left & right same) G434

▲ G <u>Power Steering Pumps</u> Direct fit, replacement power steering pumps for XR4 and Scorpio applications. (core charge required)

Power Steering Pump- XR4Ti (integral reservoir type)
Power Steering Pump- XR4Ti (remote reservoir type)
Power Steering Pump- Scorpio (all)

M434PA
G434PA
G434P

▲ H *P/S Pressure Hose* We have these hard to find pressure side hoses available for all model year XR4Ti's.

P/S Pressure Hose- XR4Ti (all years)

M434PH

**M434RB** 

▲ I <u>Strut Boot/Bump Stop</u> These H.D. strut boot/bump stops help reduce the chance of strut damage due to over-compression and/or strut rod/ seal damage from dirt and corrosion. A specially designed one piece bellows with integral (NBR), "nitrile butadiene", variable rate bump rubber make these especially well suited for lowered ride height suspensions. (sold each)

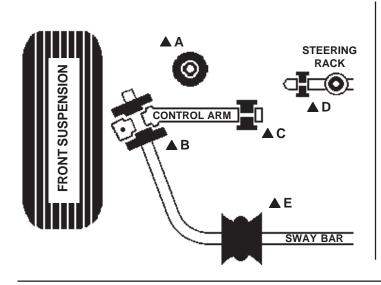
Strut Boot/Bump Stop (each) -XR4 & Scorpio

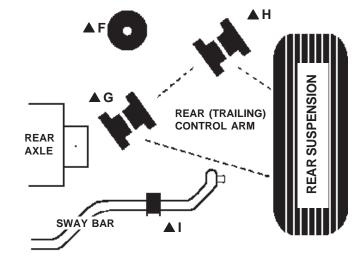
M405B

Front Strut Rotating Bearings

Upper Rotating Bearing (each) -Scorpio G403 Upper Rotating Bearing (each) -XR4 M403

# Suspension Bushing Guide





		рисі	XR4Ti
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▲ A Bushing* H.D. Upper Strut Mount (GPN)	M404	25.50
*bushing (1) refits 1 strut- 2 required per car		
A B Bushings* Standard Bubbar Outer TCA	MASSE	20.00

▲ B <u>Bushings\* Standard Rubber Outer TCA</u> M428B 20.00 \*bushings pair (2) refits 1 arm - "castelated" type bush

▲ B Bushing Set\* H.D. Rubber (GPN) M428BK-N 50.00 \*includes bushings, sleeves, washers & nuts- full car set left & right

▲ B <u>Bushing Set\* H.D. Urethane Outer TCA</u> M428BK 70.00 \*includes bushings & sleeves - full car set left & right

**▲ C Bushing\* Standard Inner TCA**\*bushing each (1) refits 1 arm - 2 required per car

▲ C Bushing\* H.D. (GPN) Inner TCA M428BH-N 16.75
\*bushing each (1) refits 1 arm - 2 required per car

▲ C Bushing Set\* H.D. Urethane Inner TCA M428BU 30.00

\*includes bushings & sleeves- full car set left & right

▲ D Bushing\* Steering Rack Standard

M434B

8.70

\*bushing each (1) refits 1 mounting point- 2 required per rack

▲ D Bushing Set\* H.D. Urethane Steeing Rack
\*includes bushings, sleeves- full rack set left & right

44.25

▲ E <u>Bushing\* Urethane Sway Bar 25mm</u> M407BU 20.00 \*bushing each (1) refits 1 mounting point- 2 required per sway bar note: these bushings are direct fit for XR4 bushing clamps

▲ E Bushing\* Urethane Sway Bar 28mm M407BAU 20.00 \*bushing each (1) refits 1 mounting point- 2 required per sway bar for use only with larger Cosworth 28mm sway bar.

note: these bushings are direct fit for XR4 bushing clamps

### **REAR BUSHINGS XR4Ti**

▲ F Bushing\* H.D. (GPN) Body Beam Mount M429B 36.75
\*bushing each (1) 2 required per car

▲ F Bushing\* H.D. Urethane Body Beam Mount M429BU 54.50
\*bushing with sleeve each (1) 2 required per car

**▲ G Bushing\* H.D. Urethane Inner TCA**\*bushing with sleeve each (1) refits 1 arm - 2 required per car

**★ H Bushing\* H.D. Urethane Outer TCA**\*bushing with sleeve each (1) refits 1 arm - 2 required per car

▲ I <u>Bushing\* Urethane Rear Sway Bar 12MM</u> M408BU 6.50 \*bushing each (1) refits 1 mounting point- 2 required per sway bar for use only with standard XR4 12mm sway bar.

▲ I Bushing\* Urethane Rear Sway Bar 16MM M408BAU 6.50 \*bushing each (1) refits 1 mounting point- 2 required per sway bar for use only with larger Cosworth 16mm sway bar.

### FRONT BUSHINGS SCORPIO

G404

32.95

\*bushing (1) refits 1 strut- 2 required per car

▲ B Bushings\* Standard Rubber Outer TCA

\*bushings pair (2) refits 1 arm - "castelated" type bush

▲ A Bushing\* Standard Upper Strut Mount

▲ B Bushing Set\* H.D. Rubber (GPN) M428BK-N 50.00 \*includes bushings, sleeves, washers & nuts- full car set left & right

▲ B Bushing Set\* H.D. Urethane Outer TCA M428BK 70.00 \*includes bushings, sleeves & nuts- full car set left & right

**▲ C Bushing\* Standard Inner TCA**\*bushing each (1) refits 1 arm - 2 required per car

**▲ C Bushing\* H.D. (GPN) Inner TCA**\*bushing each (1) refits 1 arm - 2 required per car

▲ C Bushing Set\* H.D. Urethane Inner TCA G428BU 35.00 \*includes bushings & sleeves- full car set left & right

▲ D <u>Bushing\* Steering Rack Standard</u> M434B 8.70 \*bushing each (1) refits 1 mounting point- 2 required per rack

▲ D <u>Bushing Set\* H.D. Urethane Steeing Rack</u> M434BH 30.00 \*includes bushings, sleeves- full rack set left & right

▲ E <u>Bushing\* Urethane Sway Bar 28mm</u> G407BAU 20.00 \*bushing each (1) refits 1 mounting point- 2 required per sway bar note: these bushings are direct fit for Scorpio bushing clamps only

### **REAR BUSHINGS SCORPIO**

▲ F Bushing\* H.D. (GPN) Body Beam Mount M429B 36.75
\*bushing each (1) 2 required per car

▲ G Bushing\* H.D. Urethane Body Beam Mount M429BU 54.50 \*bushing with sleeve each (1) 2 required per car

▲ H Bushing\* H.D. Urethane Inner TCA M424BI 29.75
\*bushing with sleeve each (1) refits 1 arm - 2 required per car

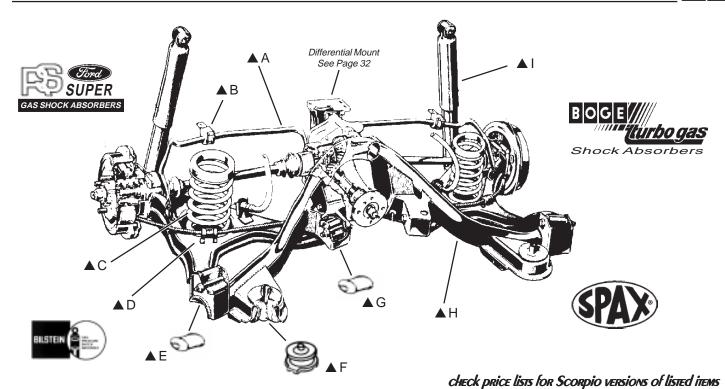
▲ I <u>Bushing\* H.D. Urethane Outer TCA</u> M424BO 29.75
\*bushing with sleeve each (1) refits 1 arm - 2 required per car

**▲ I** Bushing\* Urethane Rear Sway Bar 16MM G408BU 6.00 \*bushing each (1) refits 1 mounting point- 2 required per sway bar note: these bushings are direct fit for Scorpio bushing clamps only

Standard Rubber Bushings - Stock O.E. replacement Hard Rubber (GPN) Bushings - Similar to standard bushing but made with higher durometer rubber, stock appearance.

H.D. Urethane Bushings - High durometer moulded urethane product, superior quality, low noise, easy installation.

# Suspension (rear)



▲ A *Rear Sway Bar* The larger Cosworth Sierra 16mm rear sway bar is a direct replacement for standard U.S. spec. rear bar. (bar includes urethane bar clamp bushings) M408

Rear Sway Bar Shackle

Worn sway bar end link shackles
can reduce the rollbars effectiveness and should be
inspected and replaced if needed. (each)

Rear Sway Bar Shackle for Scorpio

M408S

G408S

▲ B *Rear Bar Bushings* H.D. urethane bushings for either standard 12mm or Cosworth 16mm bars. (sold each) (12mm size) M408BU (16mm size) M408BAU

▲ C *Spring Sets* See page 3 for spring selection.

▲ D *Rear Wishbone Set H.D.* Race prepared rear arms are fully strengthened with bracing tubes and capped to give a smooth lower surface. The shock absorber mounts are gusseted for added reliability. Inner and outer bushings are replaced with race quality spherical bearings. Wishbones are supplied in a durable shot blasted, powder coated finish.

M424

▲ E <u>Outer Rear Arm Bushing H.D.</u> Made from specalized aircraft urethane, these heavy duty bushings offer the desired firming effect while retaining a reasonable degree of shock and vibration absorption. (each- 2 halves w/sleeve) M424BO

▲ F Body Beam Mount Bushing H.D. This heavy duty rubber (GPN) bushing/mounts will reduce the for/aft movement at the rear axle beam mounting points and really does a great job in firming up the rear end. (each)

M429B

NEW note M429BU is specially designed for easy installation

▲ G *Inner Rear Arm Bushing H.D.* Made from specalized aircraft urethane, these heavy duty bushings offer the desired firming effect while retaining a reasonable degree of shock and vibration absorption. (each- 2 halves w/sleeve) M424BI

▲ I *Rear Shock Absorbers* (see below-sold as each)

**Spax TA** series shocks now feature a pressurized krypton gas design with external adjustment valve (external screw in bottom) for fine tuning the dampening to suit individual applications. Spax is England's largest and best known manufacturer of performance shock absorbers. Also available in our suspension kits-see page 3 for details. **M402A** 

**Spax Sport** One of the most popular shocks we sell-Spax fixed rate krypton gas sport shocks are an excellent choice for upgrading the handling performance on the XR. Also available in our suspension kist-see page 3 for details. **M402V** 

**Bilstein** New for 2004. Bilstein's new *T/C* series gas shocks offer the big B's renowned German made performance at a very attractive price. Bilstein shocks are now available in our suspension kits-see page 3 for details. Bilstein also make one of the few performance strut options available for the Scorpiosee price list under G402B. **M402B** 

Rally Sport Super Gas made to European Ford spec. by Koni of Holland. R/S shocks feature mono-tube high pressure design and have 4 adjustable rebound (STD., +20%, +50%, +100%) settings which can be tailored to suit individual applications.

M402RS

Boge Turbo Gas shocks are a German manufactured twin tube high pressure gas design utilizing a unique variable valving system that insures the perfect balance between ride comfort and road holding capability. Also available for Scorpio- see price list.

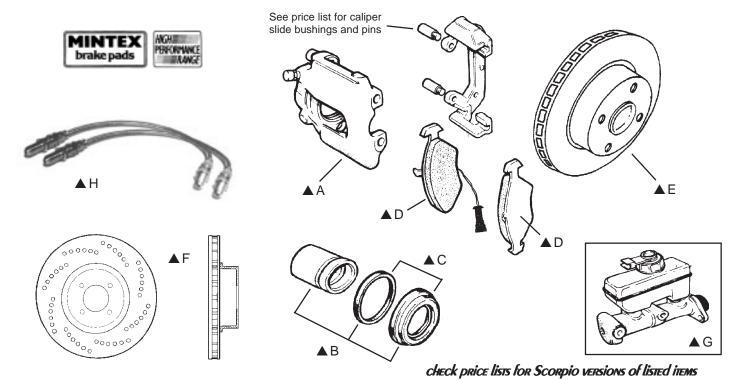
M402S

KYB Gas-Adjust shocks are well made, heavy duty dampeners that are the least expensive performance shock upgrade for the XR4. Handling is improved without sacrificing ride quality. Also available for Scorpio- see price list.

M402Y



# Brake System (front)



▲ A *Front Caliper* We offer high quality re-manufactured front calipers which are considerably less costly than new. Calipers are handed left & right and require return core charge. (drivers-left) M420CL (passenger-right) M420CR

▲ B *Caliper Repair Kit -w/piston* Ford caliper repair kits are an economical way to service a leaking or "sticky" caliper. Fitting this kit, after honing the piston bore, will cure most caliper related problems. (kit does 1 caliper)

▲ C *Caliper Seal Kit* After inspection many calipers only require new seals to put them right. (kit does 1 caliper) M420K4

▲ D *Performance Street Brake Pad Set* Premium Mintex A/F series brake pads will give enhanced brake perform over a wide temperature range with very little brake dusting. Mintex pads also incorporate the pad warning sensor wiring. This is the abusolute best performing street pad we have tested and for the price they are a steal. (XR4 & Scorpio) M420AF

▲ D Racing Brake Pad Sets Mintex 1144 is a rally/race pad that is perfectly at home on track or street, offering a high coefficient of drag (.44) and excellent modulation throughout a very wide operating range (up to 1200 degrees). Mintex 1144 is supplied preburnished for easy break-in and minimal fade on the first heating cycle. Both fade resistance and wear characteristics are excellent. Mintex pads are the only racing brake pads to incorporate the standard "low pad" sensor wiring. Match a set of these pads with our drilled or grooved sport rotors and Aeroquip stainless brake lines for a substantial increase in braking performance. (XR4 & Scorpio)

Mintex Street/Competition (M1144) M420G Mintex Full Competition (M1155) M420GA

▲ E **Standard Front Rotors** Lesser quality generic "white box" rotors tend to warp easily, don't even consider fitting them on your XR4 or Scorpio. BAT supplies only the highest quality (Brembo - Italy & United Brake - England) rotors at better than "bargain" rotor prices. (each) XR4 M425 G425 Scorpio

▲ F Cross Drilled Front Rotors Cross-drilled brake rotors use centrifugal force to draw excess brake dust and expelled gasses from the pad surface through the drilled passages into the rotors vented cavity and out. This process also improves rotor cooling giving improved braking response and resistance to fade. Our drilled brake rotors are made from Carballoy (a medium flake graphite fully pearlitic low phosphorous iron) manufactured to BS 1452 - 1990 grade 180/220 standard. The cross drilling process is handled by computer CNC milling equipment with holes arranged in a parabolic pattern giving an even sweeping effect to the pad surface ensuring maximum cooling with minimum noise and drag.

\*rotors must by purchased as (handed) pairs- priced as each

**Grooved Front Rotors** As an option we can supply slotted (grooved) pattern rotors which are manufactured to the same high standards as the above listed cross drilled versions. M425G

\*rotors must by purchased as (handed) pairs- priced as each

**Drilled & Slotted Front Rotors** As an option we can supply combination drilled & slotted (grooved) pattern rotors manufactured to the same high standards as the above listed cross drilled versions. **M425CDS** 

\*rotors must by purchased as (handed) pairs- priced as each

▲ G *Master Cylinder* high quality Bendix replacement power brake master cylinder. (specify year when ordering)

▲ H Aeroquip Brake Lines One of the more effective brake modifications you can make is to replace the standard brake hoses with Aeroquip steel braided lines. These performance brake hoses incorporate a teflon interior to keep line expansion "flexing" to a minimum. This greatly reduces the "spongy" pedal feel common to the XR4 & Scorpio brake system. Our stainless lines are assembled from genuine Aeroquip AN-3 hose with premium metric "reusable" (not the lesser quality "swaged" type) XR4Ti (1985-86) hose ends installed. M419

XR4Ti (1987-89) & Scorpio

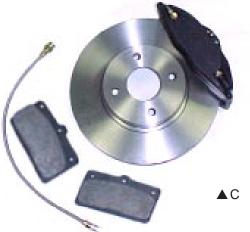
G419

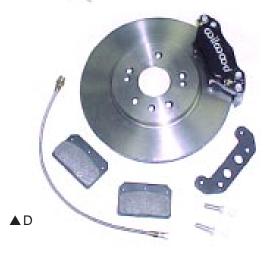
# Brake Kits & Specials











### ▲ A Front Brake Special 260 x 24mm

This kit is just the thing for replacing the standard size, wear related, front brake components. We supply high quality Euro specification rotors and premium Mintex brake pads for either XR4 or Scorpio and at a special price as compared to buying items separately.

Front Brake Special XR4ti Front Brake Special Scorpio M420SP G420SP

### ▲ B BAT R/S Front Brake Kit (283 x 24mm) XR4ti

BAT R/S Brake Kit allows larger 11.25" (283mm) Cosworth brake rotors to be fitted with standard XR calipers. Increasing rotor "swept area" in this way will greatly improve stopping power (leverage) and help to reduce high brake temperatures that can cause premature brake fade and poor pedal feel. Kits are available in 4 different component levels from as little as \$295.00, which leaves you no reason not to upgrade to larger brakes. Kits include: 285 x 24mm vented (standard or cross-drilled) rotors, Mintex brake pad set (standard or M1144), caliper mounting brackets & hardware (fitment with most 15" and larger wheels -some require modification or spacers)

Front R/S Brake Kit (283 x 24mm)

M417

includes standard rotors, standard Mintex pads, brackets & hardware

Front R/S Brake Kit (283 x 24mm)

M417A

includes X-drilled rotors, standard Mintex pads, brackets & hardware

Front R/S Brake Kit (283 x 24mm)

M418

includes standard rotors, M1144 Mintex pads, brackets & hardware
Front R/S Brake Kit (283 x 24mm)
M418A
includes X-drilled rotors, M1144 Mintex pads, brackets & hardware

### ▲ C BAT/Wilwood Front Brake Kit (283 x 24mm) XR4ti

This kit combines the performance of the larger 283mm Cosworth rotor with Wilwood 4 piston Superlite 2A calipers which are extremely ridged and transfer torque directly without unwanted flex. Construction is aluminum with stainless pistons for both weight savings and maximum head dissipation. At just 5 lbs. they are also much lighter than stock calipers. This goes a long way to reducing "unsprung" weight benefiting both braking and handling performance. Kit includes: 285 x 24mm vented rotors, 4-piston alloy Wilwood Superlite IIA calipers with pads and aeroquip brake hoses (fitment with most 15" and larger wheels-some require modification or spacers)

M416W

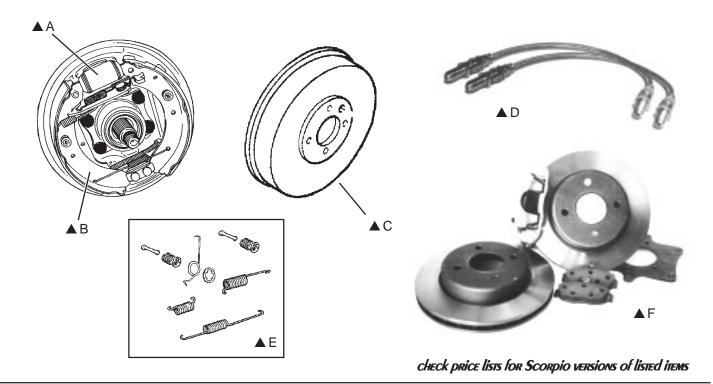
### ▲ D BAT/Wilwood Front Brake Kit (300 x 24mm) XR4ti

This kit combines even larger 300mm Cosworth rotor with Wilwood 4 piston Billet Dynalite for the ultimate big brake kit. Calipers are extremely ridged and transfer torque directly without unwanted flex and are made from aluminum with stainless pistons for both weight savings and maximum head dissipation. At just 4 lbs. they are also much lighter than stock calipers. This goes a long way to reducing "unsprung" weight benefiting both braking and handling performance. Kit includes: 300 x 24mm vented rotors, 4-piston alloy Wilwood Billet Dynalite calipers with pads and aeroquip brake hoses (fitment with some 15" & most 16" and larger wheels -some require modification or spacers)

M416W3

# 09

# Brake System (rear)



- ▲ A *Rear Wheel Cylinder* Backing plates should be checked periodically for brake fluid drips or a damp spot at the bottom (a sure sign of a leaky wheel cylinder). We recommend (and sell) only new replacement wheel cylinders because of the high incidence of failure found with re-manufactured units.

  M420WC
- ▲ B *Rear Brake Shoes* Our premium quality rear brake shoes are supplied as either European Motorcraft or Mintex brand. Both are new (non re-manufactured) high quality semi-metallic replacement linings, not the typical "white box specials". *Note: fitting reman rear shoes can be a problem as most we have seen have thicker than standard bonded linings making it difficult, if not impossible, to reinstall the drum.*M420R
- ▲ C <u>Rear Brake Drum</u> Brake drums that are warped or beyond minium specification for wear should be replaced. New rear brake drums are sold each. **M420RD**
- ▲ C *Rear Brake Drum(Grooved)* These rear drums offer an extra degree of braking performance not found when using standard rear drums. Drums have 12 spiral grooves for maximum cooling and deglazing effect. Grooved drums are sold in handed pairs.

  M420RDG
- ▲ D <u>Aeroquip Rear Brake Lines</u> One of the more effective brake modifications you can make to the XR4 & Scorpio is to replace the standard brake hoses with Aeroquip steel braided lines. These performance brake hoses incorporate a teflon interior to keep line expansion "flexing" to a minimum. This greatly reduces the "spongy" pedal feel common to most brake systems. Our stainless lines are assembled from genuine Aeroquip AN-3 hose with premium metric "reusable" (not the lesser quality "swaged" type) hose ends installed.

XR4 Rear Aeroquip Brake Line Set M419R Scorpio Rear Aeroquip Brake Line Set (4 lines) G419R ▲ E *Rear Brake Parts Kit* This handy kit includes all of the small parts, springs and other attaching hardware for the rear drum brakes. One kit does both hand sides.

M420K5

**Rear Brake Special** Our rear brake special has all the items (brake shoes, wheel cylinders & small parts kit) required for a complete rear brake overhaul, and all at a very attractive price.

M420RSPL

▲ F Rear Disk Brake Kit Converting to rear disk brakes could not be any easier than with our ventilated rear disk conversion kit. Not only will braking performance be greatly improved but servicing the friction material (pads) becomes a much easier task than messing with the old shoes. Kit incudes: calipers & mounting plates, vented 260mm rotors, brake lines, hand brake cables, and assorted hardware. M420RK

Note: see price list for individual listings on service parts for above rear disk brake kit.

XR4 & Scorpio Hand Brake Cables We have replacement hand brake cable assemblies for both the XR4Ti and Scorpio. These have been recently discontinued by Ford USA.

Hand Brake Cable XR4Ti M564 Handbrake Cable Scorpio G564

<u>Cosworth Hand Brake Cable</u> required for fitting a Cosworth rear brake conversion to the XR4 or servicing cars with existing Cosworth rear brake cables. **Z16567** 

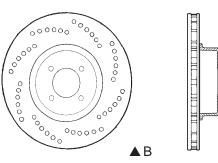
**Scorpio Rear Brake Components** BAT also stocks brake components for servicing and upgrading the rear brakes on the Merkur Scorpio.

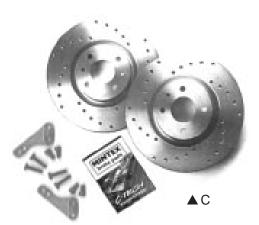
Rear Rotor (standard) G425R Rear Rotor (cross drilled) G425RCD Rear Caliper (left or right) G420RL/RR Rear Pad Set G420R

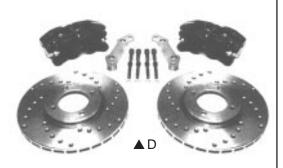
# Brake (related)













▲ A *Racing Brake Fluid* Not all brake fluid is created equally. High operating temperatures at the caliper transfers extreme heat through the piston causing lesser quality brake fluid to boil. This in turn allows the fluid to become compressed and reduces overall braking performance. The best way to counter this from happening is to use a racing specification, mineral (never synthetic) brake fluid and flush the system after each event for competition or annually on performance street driven vehicles. Both AP550 and Wilwood 570 brake fluid is DOT approved with a dry boiling point of 550-570 degrees, low viscosity minimizes aeration and permits easy bleeding.

Brake Fluid AP Competition (16.9oz. 500ml.)	MC550
Brake Fluid Wilwood 570 (12oz. 355ml.)	MC570
Brake Fluid Wilwood 570 (6 Pack)	MC57-6
Brake Fluid Wilwood 570 (24 Case)	MC57-C

▲ B *Cosworth & Scorpio Rotors* For those fortunate few who own Cosworth Sierras or have converted XR4's to Cosworth type front or rear brakes and are in need of replacement rotors we have them. Scorpio front or rear rotors in standard and cross drilled are also available. (see price list page 31)

Cosworth Front 283 x 24mm standard, X-drilled, grooved Cosworth Rear 273 x 10mm standard, X-drilled, grooved Scorpio Front 260 x 24mm standard or X-drilled Scorpio Rear 253 x 10mm standard or X-drilled

<u>Performance Brake Kits</u> Engineered competition brake kits for the ultimate in stopping power.

### ▲ C Front R/S Brake Kit (283 x 24mm)

BAT R/S "big brake" kit allows larger 11.25" (285mm) brake rotors to be fitted with standard XR calipers. Increasing rotor "swept area" in this way will greatly improve stopping power (leverage) and help to reduce high brake temperatures that can cause premature brake fade and poor pedal feel. *Kit includes:* 285 x 24mm vented (standard or cross-drilled) rotors, Mintex 1144 brake pad set, caliper mounting brackets & hardware (fitment with most 15" wheels some require slight modification)

kit supplied with standard rotors M418 kit supplied with cross drilled rotors M418A

### ▲ D Front Brake Kit (283 x 24mm) w/4 Piston Calipers

Combine the performance of the R/S large rotor kit with 4 piston calipers for the ultimate in stopping power. *includes: 283 x 24mm vented rotors, 4-piston alloy Wilwood Superlite 2A calipers with pads. (fitment with most 15" wheels -some require modification or spacers)*M416W

### ▲ D Front Brake Kit (300 x 32mm) w/4 Piston Calipers

For those who are looking for the ultimate brake performance. Quite simply the largest and most competent competition type brake kit that can be fitted to the XR4. *includes:* 300 x 32mm vented rotors with light alloy hats, 4-piston alloy Wilwood Superlite IIA calipers, caliper mounting brackets & hardware

(this kit also available for Scorpio!) G

Rear Kit (XR4 w/16" wheels) 300 x 21mm (See Price List) includes: 300 x 21mm vented rotors with light alloy hats. 4-piston alloy Wilwood

includes: 300 x 21mm vented rotors with light alloy hats, 4-piston alloy Wilwood Superlite 2A calipers, caliper mounting brackets & hardware

▲ E *Wheel Bearings* Genuine European Ford wheel bearing kits are complete with all required service parts to do a first class job. Each kit include bearings, races, seals and hub nuts to service one wheel.

Front Wheel Bearing Kit (specify left or right) -XR4	M560F
Rear Wheel Bearing Kit (specify left or right) -XR4	M560R
Front Wheel Bearing Kit (specify left or right) -Scorpio	G560F
Rear Wheel Bearing Kit (specify left or right) -Scorpio	G560R

# Driveline

▲ A *Constant Velocity Joints & Boots* The Merkur XR4Ti and Scorpio independent rear axle assemblys utilize half shafts that have inner and outer constant velocity joints. Eventually these joints and protective boots will require service. We have joints and boots available separately making it economical to replace just the worn component without having to replace whole axle assembly. However, if more than one C.V. per axle requires service, our complete axle assembly is the more cost effictive way to go. Note: right/left inboard and outboard C.V. joints and boots are interchangeable- see price list for complete axle prices (handed left & right)

Constant Velocity Joint- XR4 & Scorpio M550B M550BK C.V. Boot Kit- XR4 & Scorpio Complete Axle(specify left or right)- XR4 & Scorpio M550L/R

▲ B *Rubber Drive Shaft Coupling* The rubber "Drive Donut" or "Rotoflex Coupling" on the XR4 and Scorpio drive shaft can be a real bugger. Many owners have contacted us after being quoted up to 500.00 to totally replace the complete drive shaft assembly by the local Ford L/M dealer, as they do NOT list the rubber drive coupling as a separate service part. We import the proper replacement drive coupling and make it available at considerable savings to you. If your car exhibits a driveline shudder that increases with speed, (especially noticeable in colder weather) we recommend taking a close look at the condition of the drive coupling. Cracks in the rubber or missing pieces will require immediate replacement, loosing one of these joints at speed will be very messy! Note: BAT supplies the standard equipment XR4i drive coupling by the original supplier to Ford. This is not a lesser "fits all" component that just happens to be similar.

Rubber Drive Shaft Coupling- XR4 & Scorpio

**M17A** 

▲ C *Drive Shaft Center Support Bearing*- Replacement driveshaft center support bearing assemblys for XR4Ti and Scorpio.

**Drive Shaft Center Support Bearing-XR4Ti** M550SB **Drive Shaft Center Support Bearing- Scorpio G550SB** 

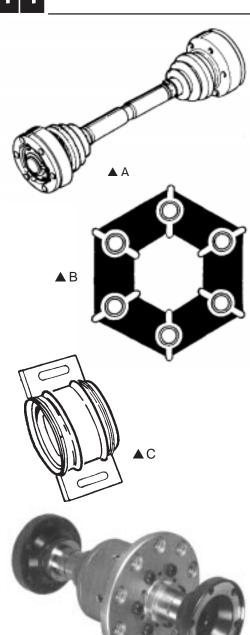
Quaife Torque Biasing Differential Quaife torque biasing differentials provide a constant and infinitely variable output to both rear wheels. These unique differentials utilize a series of helical gears which sense the amount of applied torque and adjust automatically for loss of traction. The Quaife limited slip design is also free of high wear items (clutches, ratchets and plates), making them stronger and more maintenance free than other types of limited slip units. Anyone who has had the pleasure of driving a vehicle equipped with a Quaife LSD will immediately comment on its smooth seamless performance, very unlike clutch/plate type LSD's which exhibit a notchy ratchet like take up through the drive line. The Quaife LSD that we offer is originally designed as a replacement upgrade for the Sierra Cosworth and are now supplied with output flanges tapped for either the large 108mm (Cosworth size) or smaller 100mm (XR4 size) C.V. joints.

### **Quaife Limited Slip Differential**

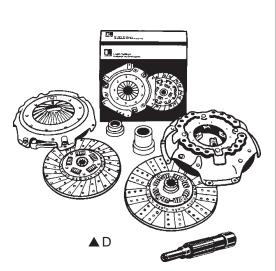
M710

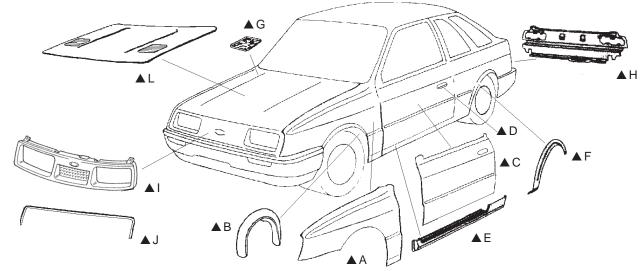
▲ E Clutch Kits We have a very good selection of clutch packages that include clutch disk, pressure plate, throw out bearing, and clutch alignment tools. Buying one of our engineered kits will guarantee best quality, performance, fitment (ease of installation) and price. First option is a new (not rebuilt or re-lined) O.E. quality replacement clutch kit by Sachs/Valeo. This clutch is best suited for standard or slightly modified cars being used under normal driving conditions. If your requirements are beyond the capabilities of the standard clutch we also have some heavy duty clutch kit options. H.D. clutch kits include pressure plates that have increased clamping force (from 30 to 50%) and clutch disks with high temperature friction materials applied. Centerforce H.D. clutch kits have a unique centrifugal pressure plate design with substantially more clamping force but requires very little pedal pressure over the stock clutch. Note: all kits are for standard transmission 1" 23 spline except where noted.

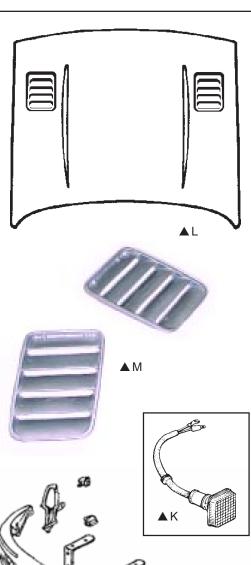
Sachs Clutch Kit XR - best quality O.E. clutch	M519K
Sachs Clutch Kit Scorpio - best quality O.E. clutch	G519K
Sachs Clutch Kit XR w/ T5 Trans - 1 1/16" 10 spline for T-5 trans	M519T5
H.D. Centerforce Clutch Kit - uprated disk & 30% p. plate	M519C
H.D. Center Force II Clutch Kit - uprated disk & 50% p. plate	M519C2
Clutch Alignment Tool - 1" 23 spline for std. transmission	S11H
Clutch Cable- XR4Ti	M562
Clutch Cable- Scorpio	G562











N

▲ A <u>Front Fenders</u> European Sierra fenders are a direct replacement for the XR4Ti and are an attractive alternative considering the high price of the American version. These fenders also include the holes required for side blinker mounting (see below). Note: specify left or right when ordering M806 L/R

▲ B *Inner Wheel Well Splash/Liners* Replacements for the commonly cracked, broken or missing inner fender splash on the XR4. Covers full inner wheel house area as origional USA versions. *specify left or right* M808L/R

▲ C Door Skin - (specify left or right)M807 L/R▲ D Door Handle XR4 & Scorpio - (specify left or right)M362 L/R▲ E Door Sill (Rocker Panel) - (specify left or right)M803 L/R▲ F Rear Wheel Arch - (specify left or right)M804 L/R▲ G Battery TrayM817

▲ H Rear Panel M815

▲ I <u>Cosworth Front Grille</u> Nothing transforms the look of the XR4Ti quite like adding a Cosworth grille. Designed with a center opening, the Cosworth grille adds additional air flow to the radiator and A/C condenser for a cooler running engine and better air conditioning performance. An intercooler could also be fitted behind the grille opening as is done on the original Cosworth Sierra and R/S 500 models. Note: Grilles are O.E. quality (injection moulded plastic) not shoddy fiberglass replicas. Suppled (primed) un-painted-includes "Ford" emblem

M320

▲ J *Grille Surround Gasket* This gasket will almost always need to be replaced when fitting a new grille. **M320S** 

▲ K *European Side Blinker Lamp Kit* Add an extra degree of safety when signaling to turn. Side blinkers fit above European fenders without modification and can also be fitted to standard Merkur XR4Ti fenders by drilling a mounting hole. Kit includes (2) lamps, wiring and templates.

M317

▲ L <u>Cosworth Hood</u> Original equipment Ford Sierra Cosworth hoods are designed to receive hood vents/louvers for additional under hood cooling. These hoods look quite distinctive as the raised center section is lower and wider than on the standard XR4 hood giving the car a more aggressive appearance. **M813** 

▲ M <u>Cosworth Hood Vents</u> Hood louvers/vents are both visually striking and functional as they help to ventilate the engine compartment. These cast aluminum vents fit the Cosworth hood, or can be installed in a standard hood by cutting holes in the proper locations. Sold as pair (2) hardware included for mounting. **M814** 

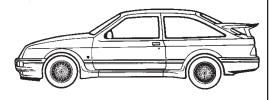
▲ N <u>Cosworth Front Spoiler/Bumper</u> We supply everything required to install the stunningly attractive Cosworth Sierra front spoiler/bumper to your XR4Ti. All components are original Ford including; bumper, bumper bar brackets, lower side fender mounting panels, fog lamps, turn signal lamps, and assorted hardware (clips & fasteners). Note: bumpers are supplied in whitecan be painted to match other colors.

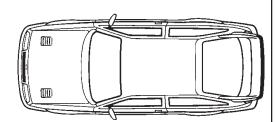
M353

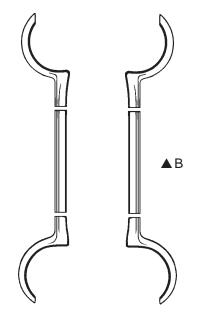
(R/S 500 Version) M353RS

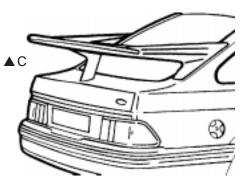
# **Bodywork**











### ▲ A Replica Cosworth Body Components

Fiberglass body panels are an alternative to the more expensive, and becoming unavailable, factory Ford versions. We have searched far and wide to import only the highest quality fiberglass replica bodywork. Even so, fiberglass is more prone to incidental damage (cracking) than the more flexible ABS plastic or urethane original Ford components. Also keep in mind that fitting is totally DIY and most items will require paint prep work, fabricated brackets and other hardware. Important Note: We often hear horror stories from customers who have ordered similar fiberglass items from European mail-order suppliers only to receive broken or substandard components, and now you own it! Worse yet, the shipping costs involved importing large, bulky, items like these can far exceed the cost of the part, and what started out as a bargain now has become a expensive learning experience. Our pricing on all items, including sheet metal & body panels, <u>includes</u> inbound freight from Europe. Once here, some items that are too large for UPS (or other carriers) will be shipped truck freight collect, we will also extend our 25% C.F. Motor Freight discount.

Front Spoiler Bumper (R/S Cosworth type) M353F Front Spoiler Bumper (R/S 500 Type) with lower "splitters\*" **M353FA** \*lower chin spoiler moulded in on lower edge (See Price List) Rear Bumper (R/S Cosworth type) Rear Wing Airfoil (R/S Cosworth type) see information below M306F Rear Wing Airfoil (R/S 500 type) M306FA Lower Rear Wing (R/S 500 type) M306L Cosworth Wheel Arches (4) & Side Skirts (2) see information below M302F Cosworth Hood (complete with vent louvers) (See Price List) Hood Vent Louvers (2) Aluminum (functional) M814

### ▲ B Cosworth Sierra Arches & Skirt

Sadly the factory Ford wheel arches have recently become unavaiable. Some side skirts still remain but for the most part the R/S arches and skirts have gone the way of all the factory R/S 500 stuff "not availabe- not replaced". In place of the origionals we can offer a reasonable cost & quality fiberglass alternative wheel arch and side skirt kit. For anyone searching out new factory arches and skirts we might still have a couple odd arches & skirts available (no full sets) call for more information & pricing.

Cosworth Wheel Arches (4) & Side Skirts (2)- fiberglass

M302F

### ▲ C Cosworth Rear Airfoil

One of the trademarks of the Cosworth Sierra is its large rear wing/airfoil. Perhaps a bit gaudy for some tastes, none the less it does a great job at keeping the rear end planted. At speeds over 100mph as much as 45 lbs. of downforce is created for added high speed stability. Anyone interested in this item had one of two choices. The factory Ford Cosworth rear wing/airfoil (still available from Ford Europe) but at over \$1800.00 who can afford it. Or the usual aftermarket fiberglass versions, although much cheaper in cost the quality suffers greatly. When we sampled most of these we were genuinely concerned that some of the replica wings might come apart, or even fly off at speed! This dilemma prompted us to undertake manufacturing a super high quality fiberglass replica that solves all the above problems. It is extremely well built, can be securely attached to the car and is attractively priced. Note: rear wings are designed to fit smaller hatch 1985-87 cars- the mounting foot will overhang on the hatch glass molding on later cars and will have to be trimmed.

Rear Wing Airfoil (R/S Cosworth type) see above section for larger RS500 version M306F

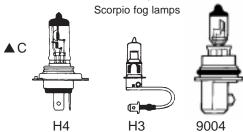
# Trim & Lighting













A <u>European Emblems & Badges</u> Re-badge your XR4 with Ford ovals and Sierra emblems or put the finishing touches on that Cosworth clone. Genuine Ford European logos will distinguish your XR4 or Scorpio from the rest. Location (on car) for emblems and sticker logos are listed below. Emblems are chrome and black plastic with self stick backing. Stickers can be applied to metal or glass surfaces.

Sierra (emblem) rear hatch left	M321S
Sierra XR4i Red (sticker) rear hatch left	M352R
Sierra XR4i Anthracite/Gray (sticker) rear hatch left	M352A
Sierra R/S (emblem) rear hatch left	M321RS
Cosworth (emblem) rear hatch left under Sierra R/S emblem	M321C
Sierra R/S Cosworth (sticker) rear hatch left	M352C
R/S (emblem) side fender XR & Scorpio	M352RS
Ghia- crest (emblem) side fender XR & Scoprio	M352G
Oval "Ford" (emblem) front grille center & rear hatch right	C321
"Ghia"- script (emblem) Scorpio rear hatch	G352G
2.9i (emblem) Scorpio rear hatch	G352L
Scorpio (emblem) Scorpio rear door sail panel	G352S

▲ B **European Headlamps** The standard US spec. XR4 & Scorpio headlights were pretty poor when new, and get worse with age-especially when the lenses turn cloudy. European headlamps will provide a significant increase in light output and they look great too. These lamps utilize all glass lensing with a halogen H-4 55/60 watt bulb for high/low main beam operation, and a halogen H-3 55 watt bulb for the built-in driving lamp. Note: Lamps are supplied in righthand drive (English) specification which has a subtle different low beam flair pattern, however, this is not very noticeable. If required left hand (German) type lenses are available separately (see price list). We recommend installing the lamps first before opting to swap out the lenses as most customers do not bother.

### Sierra XR4 European Headlamp Kit\*

M318

\*kit includes (2) lamps, rear bulk heads panels, bulbs & wiring instructions

Scorpio\* European Headlamp Kit

G318

\*kit includes (2) lamps, left & right lamp lamps/indicators & front grille sections,

bulbs, and wiring instructions

Scorpio Fog Lamp (LH)- complete replacement assembly

Scorpio Fog Lamp (RH)- complete replacement assembly

G349L

G349R

▲ C <u>Head Lamp Bulbs</u> Replacement and higher wattage bulbs for above European headlamps and standard XR4 & Scorpio aerolamps. Headlamps-H4 bulbs are fit eurolamps (not stock headlamps), 9004 bulbs are for use with standard XR4Ti & Scorpio aerolamps. Fog lamps- H3 bulbs are suitable for eurolamps and Scorpio, 880 bulbs fit only XR4Ti fogs. Krypton gas 9004 "Bright White" bulbs burn brighter with more luminous output than standard halogen type bulbs. "Blue Ion" bulbs project a, low glare, blue tinted beam- definitely a different look!

H4 55/60 watt (for high/low main beam)	ZH455/60
H4 55/100 watt (for high/low main beam)	ZH455/100
H4 80/100 watt (for high/low main beam)	ZH480/100
H3 55 watt (for fog & driving lamps)	Z H355
H3 100 watt (for fog & driving lamps)	Z H3 100
880 50 watt "Blue Ion" 50 watt (for XR4Ti fog lamps)	Z 880/50B
880 50 watt "Amber" 50 watt (for XR4Ti fog lamps)	Z 893/50G
9004 "Bright White" 45/65 watt (for high/low main beam)	Z 9-45/65W
9004 55/100 watt (for high/low main beam)	Z 9-55/100
9004 80/100 watt (for high/low main beam)	Z 9-80/100
9004 "Blue Ion" 55/100 watt (for high/low main beam)	Z 9-55/100B
Relay (Hella) 12 volt- (2) required w/ 80/100 bulbs	Z Relay12

▲ D Rear Tail Lamp Seals & Lamp Sockets Puddles in the trunk or damp carpeting might be due to leaking rear tail lamp seals. Non-functioning tail lamps are usually due to corroded lamp sockets. We have new replacements for both these USA Ford unavailable parts.

Left or Right Tail Lamp Seal- XR4 Left or Right Tail Lamp Socket- XR4 M319S M319LS



The XR4 is a unique application for road wheels. They are designed for use with (hub-centric) wheels in a 35-40mm offset- not the most common application here in the USA. We import factory Ford European Ford "Rally Sport" brand wheels, or proven aftermarket applications, that we know fit the car properly.

▲ A 6-Spoke R/S Wheel Advanced styling with flat flush spokes, silver color- clear coat finish for added protection, locking center cap w/ R/S logo.

6-spoke R/S Wheel (available sizes) (15" x 7", 16" x 7")

\$209.00 each



### ▲ B 5-spoke Cosworth Wheel

Original equipment on Cosworth Escort-optional on Mondeo in Europe (similar to 1998 SVT wheel) silver color-clear coat finish for added protection, center cap w/ Ford oval.

5-spoke Cosworth Wheel (available sizes) (15" x 6")

(16" x 6.5", 16" x 7")

\$195.00 each \$209.00 each

▲ C 7-Spoke "Soft Effect" Wheel Flush spoke, silver colorclear coat finish for added protection or optional chrome finish, locking center cap w/ Ford oval.

7-spoke "Soft Effect" Wheel (silver) available sizes (15" x 6", 15" x 7", 17" x 7.5") \$209.00 each 7-spoke "Soft Effect" Wheel (chrome) available sizes (15" x 6", 15" x 7", 17" x 7.5") \$309.00 each



▲ D 5-Spoke R/S Wheel Bright diamond cut silver face with anthracite gray on sides of spokes, clear coat finish for added protection, locking center cap w/ R/S logo.

5-spoke R/S Wheel (available sizes) (15" x 7", 16" x 7", 17" x 7.5")

\$209.00 each

▲ E 5-Spoke SVT Wheel These are original equipment 1999 SVT Contour (16" x 6.5" size) and 2001 Focus SVT (17x7") wheels.

5-spoke SVT Wheel (16" x 6.5") 5-spoke SVT Wheel (17" x 7.0")

\$135.00 each \$135.00 each



▲ F 5-Spoke Motorsport Wheel Exclusive for Ford by Compmotive. Five Spokes with Motorsport logo on one spoke, carbon look center cap w/singel hex nut center.

5-spoke Motorsport Wheel (silver) \$249.00 each available sizes (15" x 6" or 16" x 7") ET 35/38mm

▲ H *Turbine Wheel* Exclusive for Ford by Compmotive. Flush face turbine style wheel.

**Turbine Wheel (silver)** 

\$249.00 each

available size (16" x 7") ET 38mm

▲ G 5-Spoke RE Wheel Exclusive for Ford by Compmotive. "RE" Wheel (silver)

available size (15" x 6") ET 35mm

\$189.00 each

▲ I 6-Spoke FLN Wheel Exclusive for Ford by Compmotive. "FLN" Wheel (silver) \$189.00 each available size (16" x 7") ET38mm



### 4 Spoke "Turbo" Wheel

Stylish 4 spoke "Turbo" wheel available in 16" diameter with either a 6" or 6.5" width. Finish is bright silver. We highly recommend these factory Ford wheels for guaranteed quality fit and finish. Center cap included.

### 4 Spoke "Turbo" Wheel

16 x 6"	\$195.00
16 x 6.5"	\$195.00



### TW "Thrust" Wheel

10 spoke "Thrust" light alloy wheel with a locking center cover. Available in charcoal grey with polished silver lip in 15 x 7" size. A great looking wheel at a budget price.

### TW "Thrust" Wheel

15 x 7"	\$109.00
---------	----------



### 2 x 4 Spoke Wheel

Stylish 2 x 4 spoke wheel available in 16 & 17" diameters from 6.5" to 7.5" widths. Finish is bright silver. We highly recommend these factory Ford wheels for guaranteed quality fit and finish. Center cap included.

### 2 x 4 Spoke Wheel

15 x 7"	\$209.00
16 x 6.5"	\$209.00
17 x 7.5"	\$209.00

### Wheels FYI

We offer only direct fit wheels for the Contour in the 4 x 108mm pattern and 35-40mm offset range. Most are factory Ford or Ford Motorsport authorized wheels which guarantees quality fit and finish. BAT imports these wheels directly from Europe and our prices include all inbound freight charges. Outbound freight from our location to you by UPS ground will cost between 30.00 to 50.00 per set of 4 wheels- depending on your location. Please note: We often hear horror stories from customers who have ordered wheels from European mail-order suppliers only to receive damaged or substandard components, and now you own it! Sending it back or trying to get the freight carrier to pay for the damage is next to impossible they will just claim it was "improperly packed" or "it wasn't that way when it left here". Worse yet, the shipping costs involved importing large, heavy, items like wheels can far exceed the cost of the part (expect 50.00 to 100.00 per wheel) What started out as a bargain now has become a expensive learning experience.

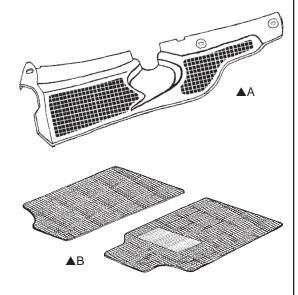
Avoid the hassles, let us supply your wheels to your door at a fair price. When you do the math you will find we are saving you money.

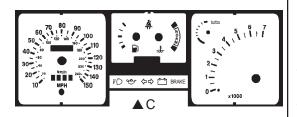
### ST200 Wheel

Stylish 14 spoke wheel available in 17" diameter with a 7" width. Factory equipment on the Mondeo ST200. Finish is bright silver. We highly recommend these factory Ford wheels for guaranteed quality fit and finish. Center cap included. (wheel might requite a spacer for XR fitment)

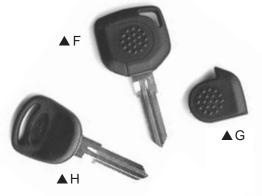


# Parts & Accessories











▲ A <u>Scorpio Cowl Cover</u> What is it, and why doesn't my car have one?... are commonly asked questions regarding this item. Ford equipped very few US market bound Scorpios with a cowl cover. This moulded plastic cover keeps dirt, debris, and small animals, from entering the ventilation fan and associated duct work. Clean out this area (once and for all) and install a new cowl cover. Your Scorpio will thank you. G369C

▲ B *Floor Mats* Foul weather mats, commonly referred to as "ice cube trays" or "waffle mats", are made of heavy duty rubber with small compartments to catch melting ice, water, mud and debris from your shoes or boots. These Euro. Ford mats are the best protection for your interior during the winter months, or when going afield. Can be placed over standard plush mats or directly on carpeting. When dirty or water filled, simply remove, drain, clean, and reinstall. Front mats will fit both XR4 and Scorpio, rear mats are for XR4 only.

Front Mat set M1010 Rear Mat Set M1011

▲ D White Gauge Face Set Colored gauges add a very unique look to a cars interior and are easy to read in day, or night. Our gauge face kit will replace the standard (black) speedo, tach/boost, fuel, and temperature gauges, and indicator lamps, with a self adhesive mylar version. Gauge faces are manufactured by an original equipment instrument supplier to Ford and GM, so quality is outstanding. White gauge faces illuminate from the rear, "back light", as the standard gauges do, and will not opaque with age like cheap reproductions will. An added benefit is the speedo is calibrated beyond 85mph, all the way to 150mph. Updating earlier cars with 85mph speedos is a snap.

▲ D <u>Dash Instrument Panel Bulb</u> lamp with (white) socket M330L

▲ E *Dash Warning Lamp Bulb* lamp with (gray) socket M330WL

▲ F XR Torch Key & Battery complete Ford key blank and lamp/battery. Torch key blanks and lamp batteries are also listed separately below.

M309KL

XR Torch Key Blank replacement key blank (less lamp) Z61179

▲ G *Lamp & Battery* lamp and battery for XR4 & Scorpio keys M309KLB

▲ H XR Standard Keys as an extra key or an alternative to the more bulky torch key, this European key blank has a molded plastic grip with wide ring slot with Ford logo.

M309K

XR Ignition Lock Assembly housing & 2 keys M350L

XR Door Lock Assembly housing & 2 keys M340L

XR Hatch Lock Assembly housing & 2 keys M815L

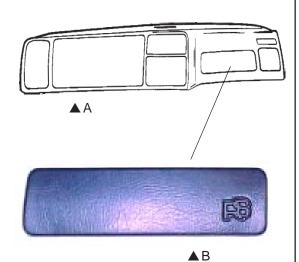
XR Hatch Striker commonly required replacement item M815S

Hatch Lock Retaining Clip commonly required replacement item M815C

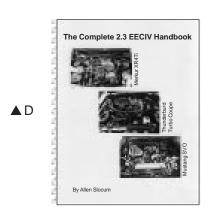
▲I *XR Window Switch* New, Ford, electric window switch panel, includes two rocker switches, complete. **M340S** 

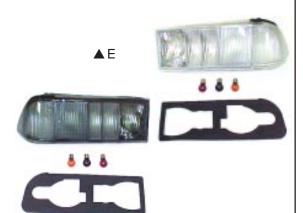
▲ J <u>Scorpio Window Switch</u> New, Ford, electric window switch (each) fits both doors and console **G340S** 

# Parts & Accessories









▲ A <u>Contoured Dash Overlay</u> Cracked vinyl dash pads are common on the XR4Ti and Scorpio, especially with the current age of the cars. This moulded plastic dash overlay is simple to install, and covers up a multitude of sin- quickly returning the interior to its original splendor. note: supplied in black can be easily painted to match interior color

Dash Cover XR4 M323
Dash Cover Scorpio G323

▲ B <u>Cosworth ECU Cover</u> Fits above glove box and covers over the storage cubbie. Embossed R/S logo, grain and finish match stock dash pad. Can be painted with vinyl paint to desired color (supplied in black).

Cosworth R/S ECU Cover

M324

▲ C <u>Scorpio Key Blanks</u> Early Scorpios (before 8/24/87) use the "chubb" type key and later (after (8/87) use the "tibbie" key. The easiest way to differentiate between the two is to look at the tip; the "chubb" version has a rounded tip, and the "tibbie" has a more flat chisel end. They are pictured (left) for comparison. Replacement keys are supplied <u>uncut</u>. Torch keys will accept lamp and battery #M309KLB

Standard Key Blank (chubb) pre 8/24/87	G309KE
Torch Key Blank (chubb)	Z61664
Standard Key Blank (tibbie) after 8/87	G309K
Torch Key Blank (tibbie)	Z64948
Key Lamp & Battery	M309KLB

▲ D <u>Book- The Complete 2.3 EEC-IV Handbook</u>- by Allan Slocum. A comprehensive view of the engineering, performance characteristics, and troubleshooting for each component of the EEC-IV engine control system. Updated 2003 issue with even more content than before!

The Complete 2.3 EEC-IV Handbook

M209

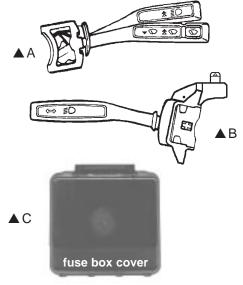
M319C

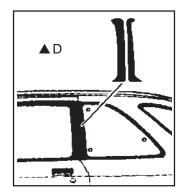
M319T

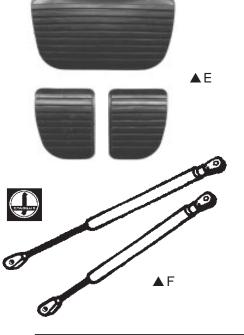
▲ E XR Rear Lens Kits Clear & Tinted These are all the styling rage on newer vehicles, and now you can get a set for your XR too. Available in either clear, or smoke/tint, these light kits not only look great, but are the perfect choice for worn-out stock rear lamps (which cost even more). Lamp kits are supplied with left and right rear lamps (your choice of clear or tinted lens), colored bulbs, reflector strips and rear gaskets.

Rear Lamp Kit XR (clear)
Rear Lamp Kit XR (smoke tint)

# Parts & Accessories









▲ A *Windshield Wiper Headlamp Switch Stalk* We supply a new Ford of Europe replacement for this commonly required electrical item. *Note: please check associated fuses before ordering- this item is not returnable.* 

### Windshield Wiper Headlamp Switch/Stalk (XR4)

M304

▲ B *Turn Signal Flash/Hazard Switch Stalk* We supply a new Ford of Europe replacement for this commonly required electrical item. Cruise control version is not available. *Note: please check associated fuses before ordering- this item is not returnable.* 

### Turn Signal Flash/Hazard Switch Stalk (XR4)

M305

▲ C <u>Fuse Box Cover</u> Missing, cracked, or not staying closed are all reasons to replace the fuse box (lid) cover on the XR4. Getting water in the fuse block can completely ruin a car or make for some very time consuming and expensive electrical repairs. Don't delay fixing this condition any longer, we have new Ford European replacements in stock.

### Fuse Box Cover M474

▲ D <u>Door Post Black-Out Trim (stick-on)</u> Is it time to replace the cracked or peeling door post black-out trim located between the door and rear quarter window? We have high quality reproductions of this discontinued Ford item.

Left Side Door Post (black-out) Trim- 2 pieces M340TL Right Side Door Post (black-out) Trim- 2 pieces M340TR

▲ E *Pedal Pads* The next time you give your cars interior a good detailing don't forget the finishing touches. New pedal pads not only improve the look of any interior, but are much safer too. Also it's not a bad idea to replace pedal pads right before entering a car show or selling a vehicle as smart buyers and judges will commonly check the pad wear as an indicator of how (hard) the car is driven.

Accelerator Pedal Pad- XR4 & Scorpio M365A
Clutch Pedal Pad- XR4 & Scorpio M365C
Brake Pedal Pad (manual)- XR4 & Scorpio M365B
Brake Pedal Pad (auto)- XR4 & Scorpio M365BA

▲ F *Rear Hatch Lift Struts* Have you resorted to using a wooden broomstick as a prop rod to hold up the rear hatch on your car? If you answered yes, you are a definite candidate for new hatch lift struts. XR4's and Scorpios have heavy rear lift gates (hatches). When one, or both, lift struts are worn, forget about having the hatch stay up, let alone raise up unassisted as when they were new. BAT has new German manufactured lift strut replacements guaranteed to keep things on the up and up.

Rear Hatch Lift Strut- XR4 (each)
Rear Hatch Lift Strut- Scorpio (each)

▲ G *Rear View Mirror* Has your rear view mirror fallen off more times than you can count? Don't mess around with nasty glues that only last a week before redepositing the mirror back on the floor. BAT has the correct Ford replacement day/night mirrors have (self-stick peel-off) adhesive backing that should keep it attached for another 10 years.

Rear View Day/Night Mirror- XR4 & Scorpio
Replacement "Stick-on Pad" (for stock mirror)

M339 M339S

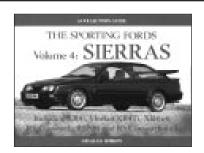
M308

G308

# Accessories (books)

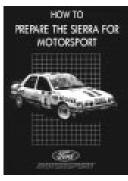


▲ A



**▲**B

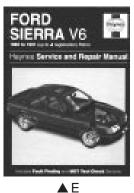




▲ C

▲ D





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SHOP MANUAL CD

▲ A <u>The Sporting Fords- Volume 4: Sierras</u> by Graham Robson. This book has comprehensive information on the development and history of all Sierra, Sierra Cosworth, and Merkur models. Chapters include production street and race versions of the cars, technical information and specifications, buyers and identification guide, performance figures and much more. Hard bound 9 1/2" x 7 1/2", 128 pages, 131 black & white illustrations.

M207

▲B <u>High Performance Sierras & Merkurs</u> by various authors. Packed with reprints of magazine articles, road tests of production and racing cars, data & comparisons, development, specifications, and tuning. Cars covered in this publication are Sierra, Sierra Cosworth, RS500, XR 4x4, and Merkur XR4Ti models. Soft bound 8 1/2" x 11", 172 pages, 200 + black & white illustrations. M206

▲ C How To Prepare The Sierra For Motorsport by Ford Motor Company Competition Department & Graham Robson. Complete guide to race preparing the European specification Sierra for motorsports competition. Chapters on modifying suspension, body, engine, driveline, brakes, clutch, and differential- including specifications and part number listings. Soft bound 8 1/4" x 11 3/4", 147 pages, 150 black & white illustrations. M205

▲ D Workshop Manual- Sierra 1982-1992 by Haynes. Covers the European Sierra & Sapphire 4 cylinder models (except Cosworth). Lots of good information covering repair procedures (light-years ahead of Chiltons). Most sections, with the exception of the engine, are the same or similar to the US cars. An inexpensive alternative or addition to the American Merkur Manual. Hard bound 8 1/2" x 11 ", 250 pages M204

▲ E *Workshop Manual- Sierra XR4i (V6)* by Haynes. Similar to above, covers the XR4i & XR4x4 V6 equipped models. *Hard bound* 8 1/2" x 11 ", 250 pages M204A

▲ F Workshop Manual- Scorpio (V6) by Haynes Covers the European Scorpio/Granada V6 models- very similar to our US spec cars. A handy manual to have. Hard bound 8 1/2" x 11 ", 250 pages G204

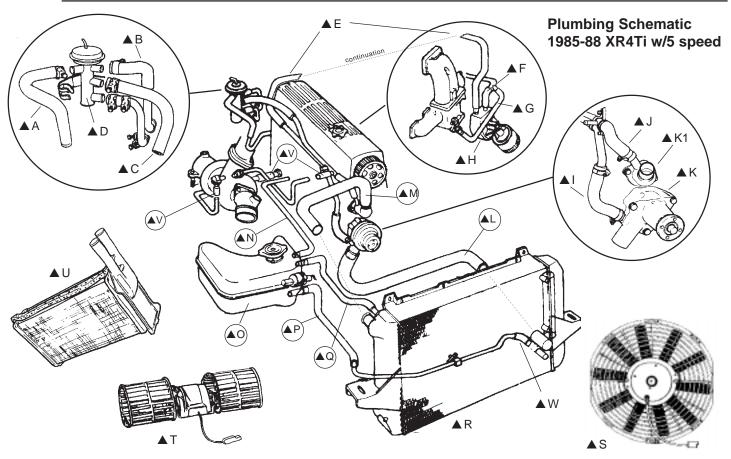
▲ G <u>The Complete 2.3L Turbo EEC-IV Handbook</u> a comprehensive view of the engineering, performance characteristics, and troubleshooting for each component of the EEC-IV engine control system. **M209** 

▲ H *Merkur Shop Manual on CD*- get a complete digital version of the actual factory service manual -used by repair shops and dealerships- to assist in maintaining and repairing your Merkur. Features procedures and specifications corresponding to every facet of the Merkur XR4Ti or Scorpio. Easy to use "clickable index" jumps to the section you need quickly. Zoom in on any page for viewing small, intricate diagrams. Print out single pages, groups of pages, or entire sections of pages to bring out to the garage. Never worry about dropping a giant, expensive loose-leaf paper manual in an oil slick again!

XR4Ti Shop Manual CD Scorpio Shop Manual CD M204CD G204CD

NOTE: Media items (books, manuals, cd's) can NOT be returend.

# Cooling System (XR)



The cooling system on the XR4Ti is fairly unique. If there is another car with more individual hoses in the cooling system, we have yet to see it. Compound this with the changes throughout the model run and it gets even more complex. We have a good inventory of the hoses and other cooling related components that fit 1985-87 XR4Ti and some (where similar or noted) for 88-1989 cars.

▲ A *Hose*- heater valve to pipe (leads to oil cooler) M421HC

▲ B *Hose*- heater valve to heater core (note: ▲ B interchanges with ▲ J)

 $\blacktriangle$  C <u>Hose</u>-heater valve to pipe along valve cover (upper) at rear (note:  $\blacktriangle$  C interchanges with  $\blacktriangle$  F) M421HB

▲ D *Heater Valve*-heater control valve XR & Scorpio M421V

▲ E *Hose*- water pipe (lower) to oil cooler M421HE

▲ F <u>Hose</u>- oil cooler to water pipe (from heat valve) **M421HB** (note: ▲ F interchanges with ▲ C)

▲ G *Hose*- oil cooler to intake manifold M421HD

▲ H Oil Cooler- replacement water to oil heat exchanger AWC1

▲I <u>Hose</u>- pipe along valve cover (lower) @ front to water pump. This one is a common problem. M421HA

▲ J <u>Hose</u>- pipe along valve cover (upper) @ front to thermostat housing (heater supply). Don't hit the road without an extra one of these! (note: ▲ J interchanges with ▲ B) M421H

▲ K <u>Water Pump-</u> quality replacement pump L6A

▲ K1 Thermostat Housing- H.D. cast Iron version L2F

▲ L *Hose*- radiator (lower) 1985-88 (MT & AT) **M421BH** 

▲ L *Hose*- radiator (lower) 1989 (auto & manual) M421BH9

M421TH9

▲ M *Hose*- radiator (upper) 1985-88 (MT & AT) **M421TH** 

▲ M *Hose*- radiator (upper) 1989 (MT & AT)

▲ N *Hose*- expansion tank (top fitting) to valve cover pipe (note: shape of hose not accurate in drawing) M421T

▲ O *Expansion Tank*-Thread-on cap (similar to Scorpio) Ford tanks, some with, or without, the fluid level sensor port. Tank caps, fluid level sensors, and sensor mounting parts are also available. (see price list for complete listing)

Tank 1985-88 M421E Tank 1989 w/o sensor M421E9

▲ P *Hose*- expansion tank (lower fitting) to radiator drain line M421TL

▲ Q <u>Hose</u>- expansion tank (middle fitting) to radiator (upper) M421TM

▲ R *Radiator*-O.E. type replacement radiators for 1985-89 manual or 1985-88 auto transmission XR4Ti's.

(1985-88 manual) M421R (1985-88 auto) M421RA (1989 manual) M421R9 (1989 auto) M421R9A

Mount/Bushing- @ radiator top mounting location M421RM

▲ S *Electric Fan*- An altermative to the sometimes troublesome dual cooling fans on the XR4Ti, this highly efficent (1100 cfm) 16" electric "puller" fan does the work of both. Wire directly or use our (optional) adjustable 165-215 degree thermostat/relay pack.

(16" puller fan) A16F-PL (thermo/relay) AFTR1

▲ T *Blower Motor & Fan A/C & Heater* -for heater and A/C, checkfuse & relay first before ordering. M470A

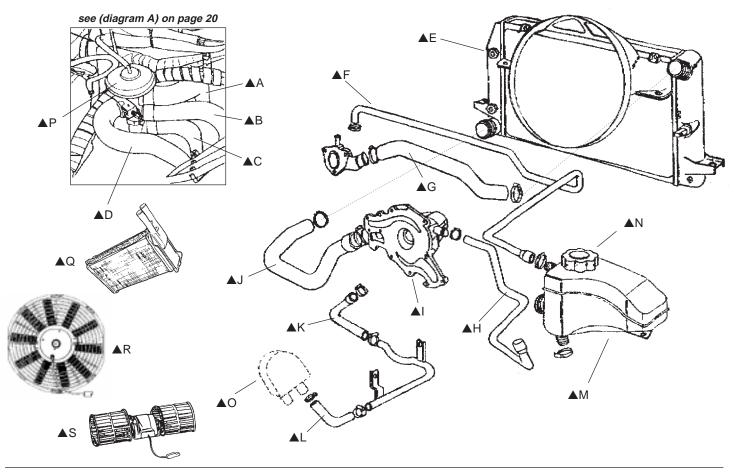
▲ U *Heater Core*- New O.E. Ford heater cores. **M471** 

▲ V <u>Turbo Water Hose</u>-high temperature CPE silicone hosefor turbo (water) inlet/outlet pipes. (1 foot makes 3 hoses) **M421WT** 

▲ W *Hose*- Lower drain pipe @ radiator lower M421HF

# Cooling System (Scorpio)





In addition to our stock of cooling system components for the XR4Ti we have added the various Scorpio related items to our inventory. The Scorpio's cooling system is only slightly less complicated than the XR4Ti's, it's only saving grace is the parts do not vary all that much from year to year. Again, as with the XR4, components that we offer are from the O.E. supplier or Ford originals.

▲ A <i>Hose*</i> -heater valve (outlet) to heater core	G421HA
▲ B <i>Hose*</i> - heater valve to engine/inlet mfld.	G421HB
▲ C <i>Hose*</i> - heater valve (inlet) to heater core	G421HC
▲ D <i>Hose*</i> - heater valve to pipe	G421HD
*for additional info see (diagram A) on page 20	
▲ E <i>Radiator</i> - new original equipment Ford radiator	rs at a verv

attractive prices. Don't be mislead into buying substandard fabricated or fits-all radiators when we can supply new Ford ones for less. (for automatic trans) **G421RA** 

(for manual trans.) **G421R** 

**G421HP** 

**G421HF** ▲ F *Hose*- coolant tank to thermostat housing ▲ G *Hose*- top radiator hose (88-89) **G421TH** 

▲ G *Hose\**-top radiator hose (89 late) has vent air bleed in line G421TH-9 (includes bleed screw).

\*for additional info see (diagram B) on page 20

▲ H Hose- tank (lower) to water pump **G421HH** ▲ I *Water Pump*- new Ford water pump

▲ I Water Pump- high quality reconditioned water pump on Ford core. G421A

*Hose\**- bypass from water pump to inlet mfld. \*for additional info see (diagram A) on page 23 ▲ J *Hose*- lower radiator hose 88-89 **G421BH** 

▲ J Hose\*- lower radiator hose (89 late) has additional tee off hose running to overflow tank @ lower bung G421BH-9 \*for additional info see (diagram B) on page 20

▲ K Hose\*- to oil cooler pipe **G421HK** ▲ L *Hose\**- oil cooler pipe to oil cooler **G421HL** \*for additional info see (diagram A) on page 20

▲ M Coolant Tank- Cracked and leaking overflow tanks are a common problem on the Scorpio. Tank pictured above is for early (1988) type cars. See page 20 for late style tanks. G421TE

▲ N Radiator Cap-cap for Scorpio and XR4's with thread-on coolant tank

▲ O *Oil Cooler*- replacement water to oil heat exchanger. If water is showing up in your oil it would most likely be either a head gasket or one of these.

▲ P Heater Control Valve- heater control valve, same on XR4 & Scorpio M421V

G471 ▲ Q <u>Heater Core</u>- Quality Ford O.E. heater cores.

▲ R *Mechanical Fan Clutch*- Quality Ford O.E. G422

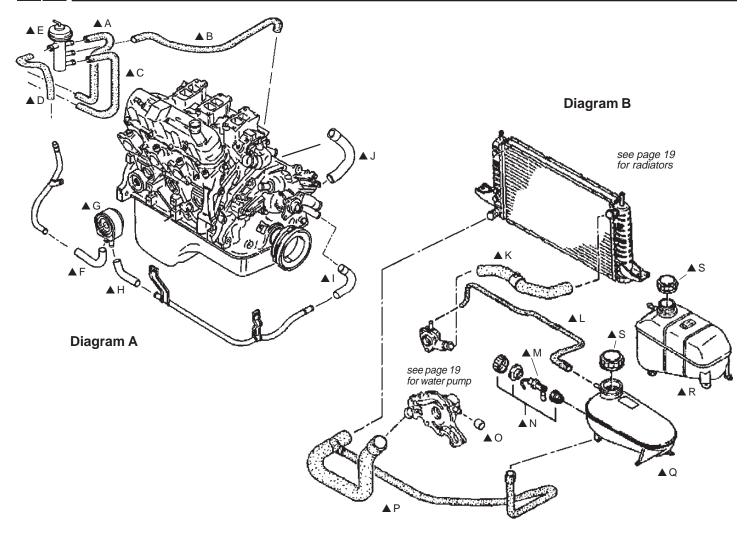
▲ R *Electric Fan*- An altermative to the Scorpio mechanical clutch fan. This highly efficent (1150 cfm) 16" electric "puller" fan moves more air and frees up a few HP to boot. Wire directly or use our (optional) adjustable 165-215 degree thermostat/relay wiring kit.

(16" electric fan) A16F-PL

(thermo/relay wiring kit) AFTR1

▲ S *Heater A/C Blower Motor*-New Ford heater blower motor for Scorpio with 8 wire harness/plug. **G470H** 

# Cooling System (Scorpio) supplement



**G421HD** 

# Diagram A - heater and oil cooling water system Scorpio 1988-89 (all)

▲ D *Hose\**- heater valve to oil cooler pipe

$\blacktriangle$ A $\underline{\textit{Hose}^*}$ - heater valve (outlet) to heater core	G421HA
▲ B <i>Hose</i> - heater valve to engine/inlet mfld.	G421HB
▲ C <u>Hose*</u> - heater valve (inlet) to heater core	G421HC

▲ E <u>Heater Control Valve\*</u>-heater control valve, same on XR4 & Scorpio M421V

▲ F <u>Hose</u>-connects coolant pipe from heater control valve to oil cooler. **G421HL** 

▲ G <u>Oil Cooler\*</u>- replacement water to oil heat exchanger. If water is showing up in your oil it would most likely be either a head gasket or one of these. **AWC1** 

▲ H *Hose\**- oil cooler to coolant pipe. G421HM

▲ I *Hose\**- connects coolant pipe from oil cooler to water pump. **G421HK** 

▲ J *Hose*- bypass from water pump to inlet mfld. **G421HP**\*these items are also shown on page 19 diagram

### Diagram B- Components unique to late 89 Scorpio Scorpio 89 (late)

▲ K <u>Hose*</u> - top radiator hose	G421TH
*hose with vent is no longer avalable	

▲ L *Hose*- coolant tank to thermostat housing **G421HF-9** 

▲ M *Tank Level Sender*- sender/float assembly. Fits all Scorpio & XR4 over flow tanks. **M421LS** 

▲ N <u>Sender Install Kit</u>-the 3 components (threaded collar, spacer ring, rubber gromett) required to stop a leaking sensor bung. Also a good idea when servicing the tank level sensor (see above part).

M421SK

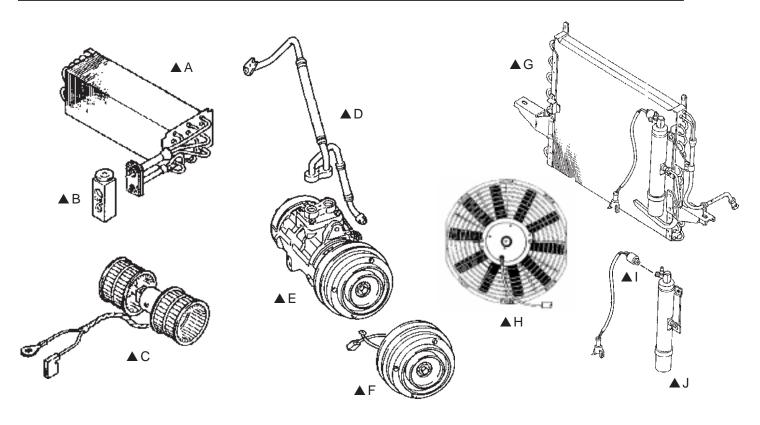
lacktriangle O  $\underline{\it Cap/Plug}$ -small rubber cap for plugging off the unused waterpump port . G421P

▲ P <u>Hose</u>-lower radiator hose (89 late) has additional tee off hose running to overflow tank @ lower bung **G421BH-9** 

▲ Q *Coolant Tank*- oval type tank (use G421TL below)

▲ R <u>Coolant Tank</u>- late style (1990-92) coolant tank. Rectangular (larger volume) tank is a direct fit upgrade to the oval version listed above. **G421TL** 

▲ S *Radiator Cap*-cap for Scorpio and XR4's with threadon coolant tank **G421C** 



Automotive air conditioning components seem to be difficult to source and expensive to boot. The XR4 and Scorpio are no exception to the rule. Reason being, a functioning A/C system is considered a "must have" and some will pay almost any price for cold air on a hot day. BAT understands that comfort is paramount, but on the other hand it should not require a second mortgage to repair your A/C system. You will find we have a selection of high quality, economically priced A/C parts too help keep you cool without breaking the bank. Most A/C Components for XR4 & Scorpio are interchangeable except where noted.

- ▲ A *Evaporator*-The evaporator (alloy fin/tube design) works ▲ F *Clutch Assembly\** Replacement magnetic clutch as a heat exchanger. Air flowing through the core is cooled, cleaned, and dried. It is also one of the major cost portions of the A/C system, with the Ford original costing around \$550.00. Check out our aftermarket alternative for less than half the cost! M470E
- ▲ B *Expansion Valve* Meters the volume of refrigerant to the evaporator. Expansion valve assembly should be replaced with evaporator or if found faulty. **M470EV**
- ▲ C Blower Motor- HVAC system blower motor includes motor and fan wheel. (Scorpio) G470A (XR4) M470A
- ▲ D Refrigerant Hoses\*-The complete refrigerant hose manifold assembly. These are specially re-manufactured units that have the hose running to the fire wall extended so it can be routed further away from the turbo's excessive heat. This is a very common failure item. (XR4ti) extended hose (Scorpio) standard length hose **G470H**

\*additional \$100.00 core charge on this item-refundable on return

▲ E A/C Compressor- The compressor is one of the major cost portions of the A/C system, with the Ford original costing upwards of \$850.00. Check out our brand new Nippondenso A/C compressor units that are complete including the clutch assembly. M470C

assembly. Available separately from compressor. If a clutch is all you need we have it. **M470CL** 

\*additional \$25.00 core charge on this item-refundable on return

- ▲ G *Condenser* The A/C condenser (alloy tube/fin core) is located ahead of the water radiator. Designed to cool the compressed refrigerants air passes over the cooling fins extracting heat to change hot gasses back to liquid refrigerant as it cools. Again, one of the major cost portions of the A/C system, with the Ford original costing upwards of \$600.00. Check out our aftermarket alternative for considerable cost savings! for XR4 M470D for Scorpio **G470D**
- ▲ H Electric Fan- An alternative to the expensive original condenser fan (\$450.00). This highly efficient (1200 cfm) 16" electric "pusher" fan moves more air for le\$\$. A16F-PU
- ▲ I Pressure Switch- The triple pressure switch assembly engages the condenser fan and switches off the compressor clutch with high/low pressure. Also a common failure item. M470S
- ▲ J Receiver/Dryer- Works as a storage/expansion tank for refrigerant as well as a system dehumidifier. It is common to replace the dryer when changing over to newer types refrigerants or whenever the A/C system has been open to atmosphere as the dryer is easily contaminated. M470R

# Turbocharger



- ▲ A <u>Standard Wastegate Actuator</u> Since the stock XR wastegate is no longer available new, we supply a high quality re manufactured unit. Internal components (diaphragm) are replaced and exterior is zinc plated.) **M521WR**
- ▲ B *Turbochargers* We offer both re manufactured stock specification and modified high performance turbos for the XR. High quality re manufactured turbos include; new center cartridge compressor/turbine wheel assembly with reconditioned outer compressor/turbine housings, new bearings, seals and O-rings and fasteners. Our high performance turbo adds a few extra tweeks. A GNX compressor wheel machined into the stock comp housing for an additional 30% airflow and a 360 degree thrust bearing is fitted for added durability. Turbos are fully dressed and include wastegate actuator, base & drain gaskets and sold on a exchange "core" basis-outright purchase will add an additional \$100.00 to the cost.

# Standard Reman. Turbocharger M522TR High Performance Turbocharger M522TM

▲ C *Intercooler Kit* If you are looking for a large high flow intercooler kit this is the one to have. Intercooler core mounts ahead of the steering rack in front of the engine facing the ground. Air is ducted up and through the core. Plumbing is kept short and allows for a larger core than what can usually be fitted in the bumper/grille area. Kit is complete with intercooler core (8" x 20" x 3.5"), mounting brackets, inlet plumbing pipes & connectors, clamps, turbo output elbow, bypass valve and additional hardware and instructions.

M522IC

- ▲ D Adjustable Boost Valve Kit Replace the troublesome stock boost control solenoid with this easy to adjust under hood boost valve. This kit uses a check valve to accurately control the boost level which allows for faster turbo spool-up (reduced lag) over typical adjustable "bleed-off" valves. This is a low cost modification and should be a "must have" for all XR's.

  M521BV
- ▲ E *Dual Port Wastegate Actuator* These are new actuators which feature an adjustable length rod (set boost & pre load) and dual vacuum ports. The dual port feature permits use of a remote mounted boost valve (see below), but can also be used as a replacement for stock actuator.

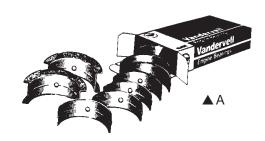
  M521WA2
- ▲ F *Cockpit Mounted Boost Valve* Remote cockpit mounted adjustable boost valve for use with dual port wastegate actuators (see above). Vacuum signal is regulated by the in car mounted valve and recirculated to the dual port actuator for precise adjustment.

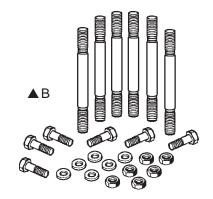
  M521TB
- ▲ G <u>Turbo Oil Feed Pipe</u> is prone to cracking/leaking and should always be replaced when a new turbo is fitted to assure proper oil flow. Just look inside an old one and you will see what we mean.

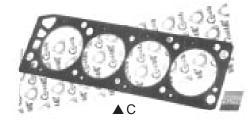
  M522P
- ▲ H <u>Turbo Inlet Hose</u> we have a version of this (discontinued by Ford) hose that links the turbo outlet pipe to the throttle body. Ours is high specification 4-ply Silicone (blue) rated to over 600 degrees, 190 psi burst pressure- better & cheaper than the original!
- ▲ I <u>Stainless Base Gasket</u> replacement for between the turbo base and exhaust manifold. L521GT

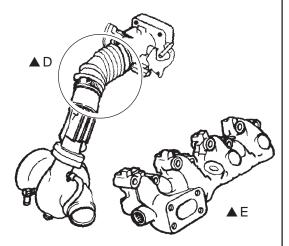
# **Engine & Related Items**

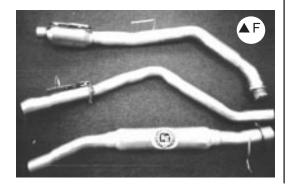












▲ A <u>Performance Engine Bearings 2.3L</u> At engine rebuild time one item notto skimp on are engine bearings. We supply only the finest ACL/Vandervell heavy duty lead-indium type bearings. All bearings are not alike, regardless of who's name is on the box. Lead-indium bearings, not lesser reticular tinaluminum, are the only type you will find in quality performance engines.

Main Bearing Set- ACL/Vandervell (standard)	L16A
Main Bearing Set- ACL/Vandervell (+.010" over)	L16B10
Main Bearing Set- ACL/Vandervell (+.020" over)	L16B20
Main Bearing Set- ACL/Vandervell (+.030" over)	L16B30
Rod Bearing Set- ACL/Vandervell (standard)	L16H
Rod Bearing Set- ACL/Vandervell (+.010")	L16110
Rod Bearing Set- ACL/Vandervell (+.020")	L16120
Rod Bearing Set- ACL/Vandervell (+.030")	L16130
Cam Bearing Set- ACL/Vandervell	L16M
Cam Bearing Set- ACL/Vandervell (360 degree O.D. groove)	L16MA
Auxiliary Shaft Bearing	L5DC

▲ B *Performance Engine Fasteners* As with engine bearings, skimping on fasteners is false economy. As a minimum install a set of H.D. rod bolts and nuts for an added degree of reliability.

Con Rod Bolt Set (H.D. SPS type) for standard 2.3 rod	L4FS
Con Rod Bolt Set (H.D. SPS type) for 5.7 Chevy I-6 rods	L4FSC
Head Stud Set (H.D. SPS type)	L2DS
Main Cap Stud Set (H.D. SPS type)	L2KS

▲ C *Engine Gaskets (2.3L Turbo)* We have a wide range of performance and speciality gaskets available for the 2.3L turbo engine from full sets to individual pieces.

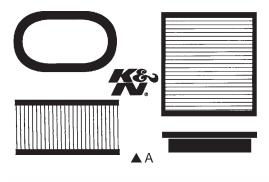
Full Gasket Set (complete engine) Felpro Top End Gasket Set (cylinder head, valve train, inlet/exhaust) Felpro Bottom End Gasket Set (block, crank & sump) Felpro Pan Set- sump rails & seals (cork) Head Gasket H.D. (Ford Motorsport turbo style) Head Gasket H.D Felpro Head Gasket Competition- Felpro #1035 (steel wire ring type) Head Gasket Competition (extreme duty racing gasket) Head Space Shim .020" Valve Cover Gasket (standard cork) Valve Cover Gasket H.D. (hi-temp rubber/includes- upper inlet gasket) Intake Manifold Gasket Set (upper & lower inlet manifold)	L15AA L15BA L15CA L15CP L15D L15DA L15DF L15DR L15DS L15ES L15EA L15F
Intake Manifold Gasket Set (upper & lower inlet manifold)	L15F
Water Outlet Gasket (thermostat housing) Water Pump Gasket (pump to block)	L15N L15P
Crankshaft Rear Seal	L15Q
Camshaft Seal Auxiliary Shaft Seal	L15R L15S
Crankshaft Front Seal	L15T

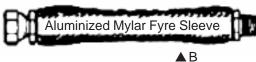
▲ D *2.3 Turbo Inlet Hose* We have a version of this (recently discontinued by Ford) hose that links the turbo outlet pipe to the throttle body on XR4Ti, T-Bird & SVO. Ours is higher specification 4-ply Silicone (blue) rated to over 600 degrees, 190 psi burst pressure- better & cheaper than the original! **M22H** 

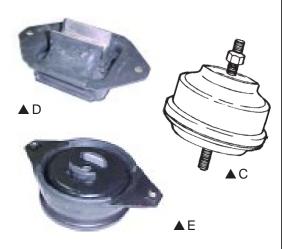
▲ E,F *Exhaust Components* We offer the *Modern Performance* line of exhaust related items for the XR4Ti including full systems (hi-flow down pipe, converter and muffler) as well as cat back systems (excludes converter). Exhaust piping and mufflers are constructed in heavy 14 gauge aluminized tubing, converters and mufflers are straight through design for minimum restriction. These systems are unparalleled for performance and sound great too. The 3" down pipe can be added to standard or *Borla* systems for increased performance. We also stock the standard Ford cast iron exhaust manifolds (which are prone to cracking) or alternate stainless tubular exhaust headers.

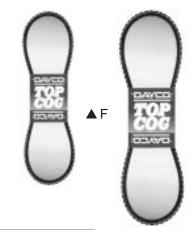
Exhaust System 3" (full system) S.S. muffler & converter	M522
Performance Exhaust System 2.5" (down pipe w/cat back)	M522B
Exhaust Down Pipe 3"	M522DP
Exhaust Manifold (standard cast Fomoco)	M521
Exhaust Header 2.3 Turbo (tubular stainless steel)	L521T
Gasket (stainless)- Turbo to Exhaust Manafold	L521GT
Exhaust Hanger (rubber donut)	C522H

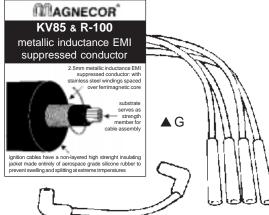
# **Engine & Related Items**











▲ A *Performance Air Filters* A quick and easy performance modification is to replace the standard air filter with a direct fit KN high performance air filter.

Merkur XR4Ti (2.3L Turbo) **M22P** Merkur Scorpio (2.9L V-6) G22P

▲ B *High Temp Fyre Sleeve* Under hood temperatures on the XR4Ti can be quite severe. Slipping a length of fyre sleeve over critical wiring or hoses (water & A/C) will add an extra degree of protection. Fyre Sleeve provides radiant heat protection up to 800 degrees. Sleeve is sold per foot and sized by internal diameter. Hoses or wiring can be disconnected at one, or both ends, then slipped through fyre sleeve. Optionally sleeve can be unstitched at the seam and wire tied in place.

Mylar Fyre Foil Sleeve -10 (7/8" I.D.) per foot	320510
Mylar Fyre Foil Sleeve -12 (1" I.D.) per foot	320512
Mylar Fyre Foil Sleeve -16 (1 1/4" I.D.) per foot	320516
Mylar Fyre Foil Sleeve -20 (1 1/2" I.D.) per foot	320520

▲ C Engine Mount Insulators We have an alternative for the discontinued standard Ford XR4Ti motor mount/insulator. Simply remove the old motor mount assemblies, discard the worn-out rubber portion, reuse the top and bottom metal plates with our replacement insulators. Note: slight modification requires 10mm holes in plates to be increased to 12mm. Scorpio version is direct fit Ford manufacture

Engine Mount Insulator (left & right same) XR4Ti M433 Engine Mount Insulator (left & right same) Scorpio- new Ford G433

▲ D Scorpio Transmission Mount /Insulator Original equipment rear transmission mount/insulators are a direct fit replacement for automatic & manual Scorpio. The heavy duty version from the Cosworth can be used if you require something slightly firmer.

Transmission Mount Insulator- (automatic & manual) G433T Transmission Mount Insulator H.D.- (automatic & manual) **M433TA** 

▲ E XR4Ti Transmission Mount /Insulator Original type rear transmission mount/insulator for automatic & manual XR4Ti. This newly manufactured, direct fit, "round mount" is the perfect replacement for this long since discontinued Ford part.

Transmission Mount Insulator XR4Ti- (automatic & manual)

M433T

▲ F Engine Belts H.D. Our search for the ultimate heavy duty engine accessory v-belts lead us to the top cog "Gold Series" by Dayco. Top cog vbelts are built to last up to 20% longer than conventional belts. A unique cogged design increases flexibility and airflow around the belt for reduced friction and heat. Laminated design with high temperature rated polyester cords provide maximum tension holding (reduced slip) over the life of the belt.

Belt- XR4Ti (1985-89) W. Pump, Alt, P. Steering (2 required)	M6G
Belt- XR4Ti (1986-89) A/C Compressor	M6H
Belt- XR4Ti (1985) A/C Compressor	M6HA
Belt- Scorpio (1988-89) Fan & Power Steering (2 required)	G6G
Belt- Scorpio (1988-89) Alternator	G6GA
Belt- Scorpio (1988-89) A/C Compressor	G6H

▲ G *Performance Ignition Wire Sets* We have tried a number of different ignition wire options on the 2.3 Turbo and 2.9L V6 engines and have found the Magnecor brand to offer superior quality, performance, and durability. Cables are red in color with 8mm, 8.5mm and 10mm cable diameters.

Merkur XR4Ti (2.3L Turbo)

Ignition Wire Set- (8mm w/silicone jacket and boots)
Ignition Wire Set- (8.5mm KV85 wire w/silicone jacket and boots) L9HT M9HT Ignition Wire Set- (10mm R-100 wire w/silicone jacket and boots) M9HTR

Merkur Scorpio (2.9L V6)

Ignition Wire Set- (8mm w/silicone jacket and boots) **G9HT** 

Ignition Wire Set- (8.5mm KV85 wire w/silicone jacket and boots) G9HT9

# **Engine Components**

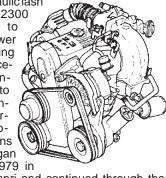
# 28

### 2300 Turbo Engine Components

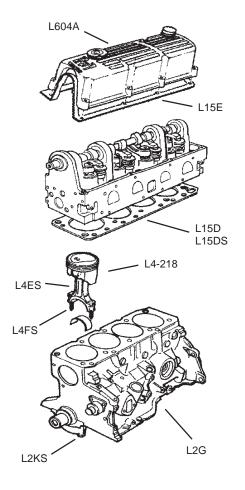
<u> </u>		
Core Plug Set -Brass	L2FP	9.00
Main Cap Stud Set (H.D. ARP)	L2KS	105.00
Full Gasket Set (Felpro) 1985 engine	L15AA	95.00
Full Gasket Set (Felpro) 1986-89 engine	L15AB	124.50
Top End Gasket Set (Felpro) specify year when ordering	L15BA	55.00
Top End Gasket Set (Felpro) with hi-temp valve cover set	L15BB	79.50
Bottom End Gasket Set (Felpro) 1985 engine (cork pan)	L15CA	40.10
Bottom End Gasket Set (Felpro) 1986-89 engine (rubber pan)	L15CB	73.85
Oil Pan Gasket (1 piece rubber) 1986-89	L15CP	34.25
Head Gasket (Felpro)	L15DA	19.50
Competition Head Gasket (Felpro #1035) steel wire ring type	L15DF	59.50
Competition Head Gasket (extreme duty racing gasket)	L15DR	29.50
Valve Cover Gasket- Cork	L15E	6.79
Valve Cover Gasket H.D. (1 piece rubber) includes upper manifold	L15EA	24.00
Intake Manifold Gasket Set	L15FA	11.40
Exhaust Manifold to Cylinder Head	L15GA	7.50
Turbo Charger to Exhaust Manifold (stainless)	L521GT	
Water Outlet Gasket	L15N	CALL
Water Pump Gasket	L15P	CALL
Camshaft Seal	L15R	8.25
Auxiliary Shaft Seal	L15S	9.25
Crankshaft Front Seal	L15T	16.08
Oil Pump (standard) Melling	L2P	55.00
Oil Pump- (high pressure/ high volume)	L2HP	105.00
Water Pump (new)	L6A	73.10
Water Pump (recon)	L6AA	39.00
Fuel Pump- Electric XR4Ti (in line)	M10A	165.00
Fuel Pump- Electric XR4Ti (in tank)	M10AT	125.00
Performance Piston- Power Forged #250F (std, +.020", +.030", +	.040", +.0	60 sizes)
exact replacement for standard 2.3 turbo piston, light weigh		,
design, 1.589" comperssion height for 8.0:1 compression, 2r	mm 2mm	4.75mm
ring land, supplied with wrist pins and locks.	L4-250F	85.00
Ring Set- Moly type 1/16", 1/16", 3/16" (std, .020", .030", .040	0"060")	
*for above "performance pistons" - specify size	L4R	89.00
Ring Set*- Gapless Moly type 1/16", 1/16", 3/16" (std, .020", .0	130" 040	
*for above "performance pistons" - specify size	L4TF	119.00
Ring Set*- Gapless Moly type 1/16", 1/16", 3/16" (std, .025", .0		,
*for above "performance pistons" - file fit top ring	L4T1	154.00
Ring Set*- Gapless Moly type 2mm, 2mm, 4.75mm (std, .020", .03	0", .040", .	060")
*for standard OE type pistons - specify size	L4TFA	119.00
Main Bearing Set- ACL/Vandervell (std, .010", .020", .030")	L16A	32.65
Connecting Rod Each (recon) Ford	L4E	30.00
Connecting Rod Set- (4) Forged H-beam 5.20" length	L4ES	549.00
Connecting Rod Set- (4) Forged I-beam 5.20" length	L4ESB	398.00
Connecting Rod Set- (4) Forged H-beam 5.70" length	L4ESA	549.00
Rod Bearing Set- ACL/Vandervell (std, .010", .020", .030")	L16H	16.35
Con Rod Bolt Set- ARP H.D. (for standard 2.3L rod)	L4FS	52.50
Head Stud Set- ARP H.D.	L2DS	115.50
Cam Bearing Set- ACL/Vandervell	L16M	18.50
Cam Bearing Set- ACL/Vandervell (360 degree O.D. groove)	L16MA	18.50

Utilizing a design similar to the earlier German 2000 OHC "Pinto" engine the 2300 "Lima" engine eventually replaced the 2000 OHC in most North American Ford 4 cylinder vehicles from 1974 on. Built for lower maintenance with the

addition of hydraulic lash adjusters the 2300 was designed to operate in a lower RPM range using its larger displacement and increased torque to its best advan-Perfortage. turbomance charged versions of the 2300 began to appear in 1979 in



the Mustang/Capri and continued through the 80's in a more refined and powerfull EFI turbo version. A reduced bore 2000 displacement "Ranger" truck engine (from 1983-87) was also produced. Some late production "Lima" engines are equipped with hydraulic roller cam and valve train, and other versions use dual spark plug cylinder heads. The 2300 is a fairly rugged engine in its stock form, however some components will require up-rating with performance components if high RPM duty is required. The "Lima" series turbo and normally aspirated engines respond quite well with a bit of performance tuning and though lacking in refinement do give quite a bit of bang for the buck.



# **Engine Components**

### Camshafts- see chart below

Grind# Pricing \$	Description	Power Band	Cam Lift inlet/exhst.	Valve Lift inlet/exhst.	Duration inlet/exh	Timing Figures	Timing Inlet @ Full Lift	Valve Clearance inlet/exhst.	Comments
2300 Turl	bo Camsha	afts (Hydra	aulic) *dur	ations qu	oted gro	ss & .050'	- timing	events ar	e @.050"
H260 \$169.00	Hydraulic	2500-6000	.252"/.252"	.416"/.416"	272/272 220/220	0/40 40/0	110	0/0	smooth idle, strong low and mid performance, turbo suitable, auto & manual trans.
H283 \$169.00	Hydraulic	3500-6500	.274"/.274"	.453"/.453"	276/276 224/224	2/42 42/2	110	0/0	good idle, strong low and mid performance, turbo suitable, manual transmission only

Aux. Shaft Bearing	L5DC	20.25
Cam Follower- (standard O.E. type) each	L5B	7.50
Cam Follower- (roller type) each	L5BR	21.00
Hydraulic Lash Adjuster Set	L5BA	43.00
Intake Valve- (standard O.E. type)	L3H	8.25
Intake Valve- 1.740" (oversized stainless steel hi-flow) each	L3HA	13.25
Intake Valve- 1.890" (oversized stainless steel hi-flow) each	L3HB	15.00
Exhaust Valve- (standard O.E. type) each	L31	25.75
Exhaust Valve- 1.510" (oversized stainless steel hi-flow) each	L31A	13.25
Exhaust Valve- 1.590" (oversized stainless steel hi-flow) each	L31B	15.00
Valve Spring Set- (sport spring set for hydro cams to .480" lift)	L3F	73.75
Electric Fan Switch -XR	M450FS	31.95
Knock Sensor-XR	M450KS	63.50
Engine Coolant Temp Sensor (ECT)-XR	M450EC	33.25
EGR Valve	M450EGF	R 149.00
Idle Speed (Air Bypass Valve) XR/Scorpio	M450IS	87.50
Throttle Position Sensor (TPS)-XR	M450TP	47.60
Oxygen Sensor (OS)-XR	M450OS	60.50
Oil Pressure Switch-XR	M450P	6.40
Water Temp Gauge Sender- XR (purple band)	M450F	DISCONTINUED
Adjustable Cam Sprocket (key way type)	L5F	34.95
Adjustable Cam Sprocket (vernier type)	L5FA	95.75
Cam Belt- (H.D. Pirelli type)	L5GA	13.95
Cam Belt Tensioner -Ford	L2J	49.50
Fuel Injector 2.3L Turbo- Remanufactured (35pph -brown top) each	M7G	DISCONTINUED
Intake Hose- Turbo Outlet to Throttle Body (Hi-Temp 4-Ply Silicone "Blue") XR4Ti, T-Bird & SVO	M22H	44.50
Air Vane Meter* 50mm (T-Bird) reconditioned	L7V	164.50
Air Vane Meter* 65mm (SVO) reconditioned	L7VA	175.00
*can also be used for performance upgrade on XR4Ti with "PE" programed chip (call for information)		
Distributor- 2.3L Turbo (reman) w/o cap, rotor, module (35.00 core)	L9AB	119.00
Distributor Cap H.D. (hi-temp epoxy w/brass terminals)	L9B	16.98
Distributor Rotor H.D. (hi-temp epoxy) 85-86 screw down type	L9F	7.50
Distributor Rotor H.D. (hi-temp epoxy) 87-89 push-on type	L9FA	8.90
Ignition Module TFI (on distributor)	L9M	80.75
Ignition Wire Set- (8mm custom length w/silicone jacket and boots)	L9HT	42.50
Ignition Wire Set- (8.5mm custom length w/silicone jacket and boots)	M9HT	74.50
Ignition Wire Set- (10mm custom length w/silicone jacket and boots)	M9HTR	85.50
Performance Air Filter KN (2.3L Turbo) XR4Ti	M22P	39.90

# **Engine Components**























### **Engine Builders Kits**

Time for that inevitable engine rebuild? BAT takes the guess work out of acquiring all the right components by offering these prepackaged performance engine service kits. Our top end (cylinder head) and bottom end (short block) rebuilding kits are supplied complete with premium high performance parts. With the help of a competent machine shop these rebuild kits will restore your engine to better than new condition. As usual we have gone to great lengths to supply only the absolute best components for the job and still managed to keep the prices reasonable.

### Performance Short Block Rebuild Kit (2.3L Turbo)

- (1) Full Gasket Set -Felpro L15AB
- (1) Main Bearing Set -ACL Vandervell (specify size; STD, +.010", +.020", +.030") L16A
- (1) Rod Bearing Set -ACL Vandervell (specify size; STD, +.010", +.020", +.030") L16H
- (4) Forged Pistons -Power Forged (specify size; STD, +.010", +.020", +.030", +.040", +.060") *L4250F*
- (1) Gapless Ring Set -Total Seal (specify size; STD, +.010", +.020", +.030", +.040", +.060") *L4TF*
- (1) Rod Bolt & Nut Set H.D. -A.R.P. L4FS
- (1) Oil Pump- Melling L2P

### Short Block Rebuild Kit L501 \$749.00 as above listed

Optional Items to Short Block Rebuild Kit —

- A) Forged Connecting Rod Set "I" beam type w/ H.D. fasteners (add \$350.00)
- B) Forged Connecting Rod Set "H" beam type w/ H.D. fasteners (add \$525.00)
- C) Main Stud Set H.D. A.R.P. (add \$75.00)
- D) Crankshaft (if required) resized, polished, balanced, indexed (add 349.00)
- E) Crankshaft "Power Pulley" (add \$90.00)

### Performance Cylinder Head Rebuild Kit (2.3L Turbo)

- (1) Top End Gasket Set\* Felpro L15BA \* see notes below
- (1) Cam Bearing Set -ACL Vandervell L16M
- (1) Head Bolt Set L2D
- (4) Exhaust Valves -Stainless Hi-flow 1.51" L31A
- (4) Inlet Valves -Stainless Hi-flow 1.74" L3HA
- (1) Valve Spring Set H.D. L3F
- (8) Cam Followers L5B
- (1) Hydraulic Adjuster Set (lifters) L5B
- (1) Cam Sprocket (index type) L5F
- (1) Cam Belt H.D. *L5G*
- (1) Camshaft (.416" / 272 turbo profile) L5H260

### Cylinder Head Rebuild Kit L502 \$695.00 as listed above

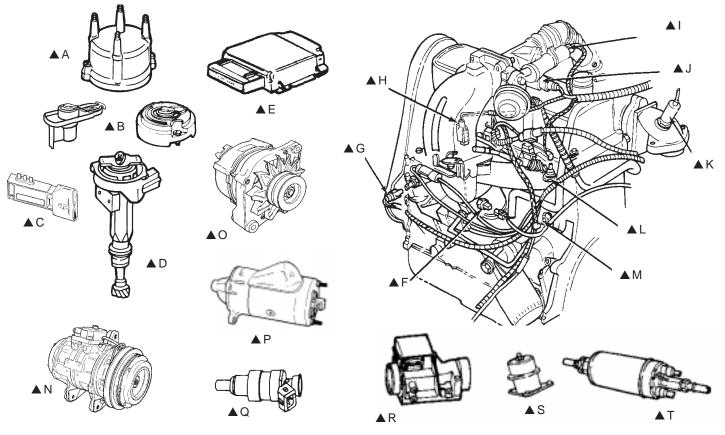
Optional Items to Cylinder Head

- (A) Head Stud Kit H.D. A.R.P. (add 45.00)
- (B) Adjustable Cam Sprocket -alloy "vernier" type (add 50.00)

\*Notes: this item (L15BA) is not required when ordering L502 cylinder head kit with L501 short block kit (it is already included with L501). We will offer a 50.00 discount when ordering L502 and L501 together.



# **Engine & Related Components**



▲ A <u>Distributor Cap 2.3L</u> Heavy duty epoxy/re	-
w/brass terminals.	L9B
▲B <i>Distributor Rotor 2.3L</i> Heavy duty epoxy/res	sin rotor
(screw down type 1985-86).	L9F
▲B <i>Distributor Rotor 2.3L</i> Heavy duty epoxy/res	sin rotor
(push- on type 1987-89).	L9FA
▲ C <u>TFI Module 2.3L</u>	L9M
▲D <i>Distributor 2.3L</i> excludes cap, rotor,	module
(35.00 core) re manufactured	L9AB
▲D <i>Distributor 2.9L</i> excludes cap, rotor,	module
(55.00 core) remanufactured	G9AB
▲E <i>Engine Management</i> XR4Ti and Scorpio	engine
management computers. (75.00 core) remanufactured	
XR4TI (specify auto or manual trans)	M9C

(35.00 core) re manufactured L9AB
▲D <i>Distributor 2.9L</i> excludes cap, rotor, module
(55.00 core) remanufactured G9AB
▲E <i>Engine Management</i> XR4Ti and Scorpio engine
management computers. (75.00 core) remanufactured
XR4TI (specify auto or manual trans) M9C
2.3L Turbo Engine Sensors & Switches  AF Electric Fan Switch -XR  AG Knock Sensor-XR  M450KS  AH Engine Coolant Temp Sensor (ECT)-XR  M450EC  AI Idle Speed (Air Bypass Valve) XR/Scorpio  AJ Throttle Position Sensor (TPS)-XR  M450TP  AK Oxygen Sensor (OS)-XR  M450OS  AL Oil Pressure Switch-XR  M450P  MWater Temp Gauge Sender- XR (purple band)  Sensors & Switches (other)  Air Charge Temp. Sensor (ACT) Scorpio  Coolant Temp. Sensor (ECT)- Scorpio  M450EC  MAP Sensor -Scorpio  Oil Pressure Switch- Scorpio  G450M  Oil Pressure Switch- Scorpio  G450P  Oxygen Sensor- Scorpio  Oxygen Sensor- Scorpio  Throttle Position Sensor- Scorpio  G450TP

<b>▲</b> N	A/C	Com	<u>pressor</u>	XR4/Scorpio	Nippondens	o A/C
comp	ressor	units, ir	ncludes clut	tch. <i>remanufact</i>	ured M	470C

▲ O *Alternator* Bosch (90 amp) alternators available for XR & Scorpio. (10.00 core) *remanufactured*.

Alternator-XR4Ti	M24A
Alternator-Scorpio	G24A

▲ P <u>Starter</u> XR4Ti and Scorpio starter units. (30.00 core) *re manufactured.* 

Starter - XR4Ti	M23A
Starter-Scorpio	G23A

▲ Q *Fuel Injectors* Replacement injectors for XR4Ti.

35 lb. Standard Brown Top Injector (reman)	M7G
35 lb. Optional Disk Type Injector (new)	L7G

▲ R <u>Vane Air Meter</u> Larger 50mm (T-bird) and 65mm (SVO) VAM's can be fitted as a performance upgrade on the XR4Ti. ("PE" computer chip upgrade required)

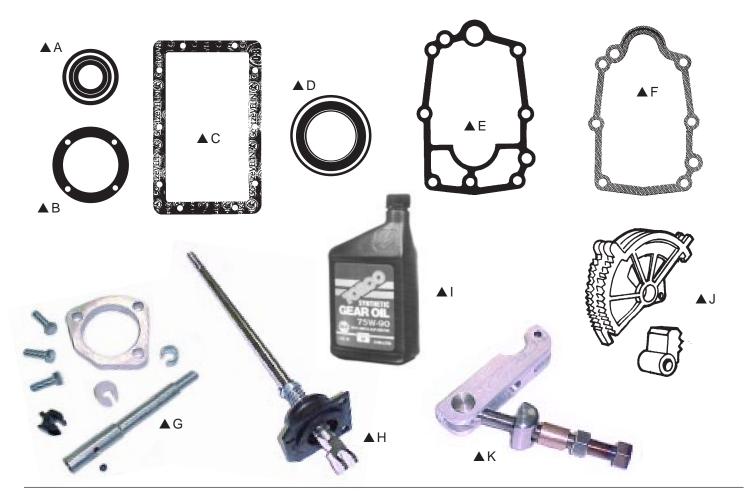
50mm VAM (reman)	L7V
65mm VAM (reman)	L7VA
Standard VAM XR4Ti (reman)	L7VM

▲ S *Fuel Pressure Regulator* Standard replacement regulator for XR4Ti. **M7PR** 

▲T *Electric Fuel Pumps* New XR4Ti (in line) high pressure and (in tank) low pressure fuel pumps

Electric Fuel Pump (in line) high pressure	M10A
Electric Fuel Pump (in tank) low pressure	M10AT

Important note: all electrical items are pretested before shipping. Carefully check all wiring, fuses & relays before ordering. Electrical items are not returnable!



▲ A Oil Seal-input Shaft (front) T9 Transmission

▲ B *Gasket*-input bearing retainer to main case (front) T9 Transmission M702G

▲ C *Gasket*- top Cover T9 Transmission M716

▲ D *Oil Seal*- extension housing (tail shaft) T9 **Transmission** M719

▲ E *Gasket*- adaptor plate (bearing carrier) to main case T9 Transmission M709

▲ F *Gasket*- adaptor plate (bearing carrier) to extension housing (tail shaft) T9 Transmission M708

▲ G Short Shift Kit- Enhance the "link" between driver and transmission with our short shift kit for 5-speed T9 transmission equipped cars. If you like the shifter "feel" on a Hurst equipped Mustang GT- this kit offers similar results. Customers often remark that this (kit) is one of the best modifications that they have made to their cars, especially considering the price, and ease of installation. Just think about how many gear changes you make in a day, let alone a week- shouldn't every shift be quick, light and precise?

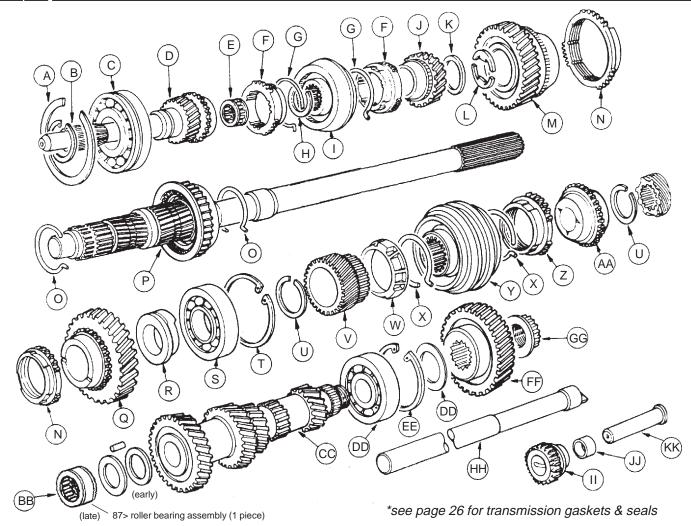
M703 ▲H <u>Competition Shifter</u>- A serious short throw competition gear lever featuring a robust large diameter shaft placed within a spherical bearing. The all metal construction will transmit additional noise but this is a small penalty to pay against the strength, speed and quality of the gear change achieved. M717

> ▲ I *Gear Oil*-Torco synthetic gear oil is designed to withstand tremendous heat and provide extreme anti-score protection under high torque "shock loading" conditions. That is why most Indy car and drag race teams rely on Torco protection. Torco SAE 75w90 gear oil is GL-6 rated and includes limited slip additives. Great for both transmission and differential applications. Torco synthetic gear oil greatly improves the shift "feel" of T9 transmission, shifting becomes light and precise, almost like a tune-up in a bottle. Notes: transmission will require 2 quarts (2.25 to 3.34 pint capacity depending on year) and rear axle 1 quart (1.6 pint capacity) Gear oil not for T5 transmissions (use ATF type fluid).

> ▲ J **Quadrant & Pawl Kit**- When the clutch pedal "ratchet adjuster" wears out it contributes to poor pedal feel and an annoying clicking noise. Renewing the quadrant and pawl with this handy kit will alleviate the problem. M368

> ▲ K Manual Clutch Adjuster Kit This kit makes the (sometimes troublesome) automatic adjuster completely manual. Benefits are quicker shifting with clean engagement, adjustable engagement, and pedal height. M368A

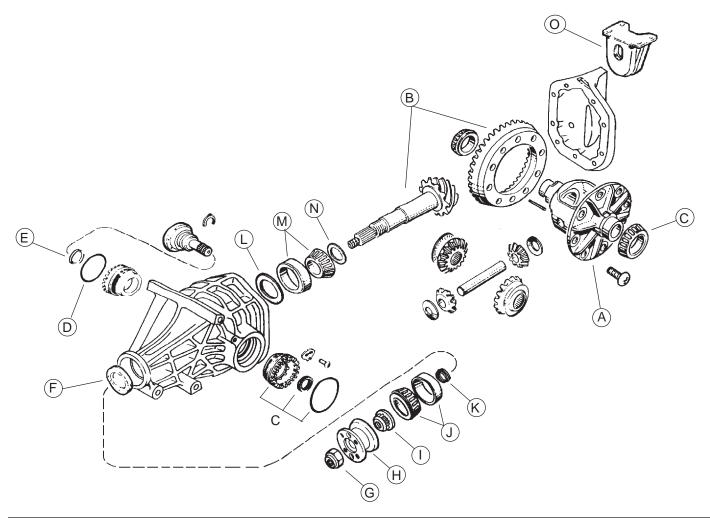
# **Transmission Components**



The Ford Type 9 (T9) or Hummer transmission is a 5-speed version/conversion (an overdrive portion is added in a casting extension behind the main case) of the venerable Type E 4-speed. The only problem with this transmission is the 2.3 turbo engine's torque output is near the top of T9's performance envelope. It would seem that Ford's choice of manual and automatic transmissions were both marginal at best for use in the XR4Ti. Even so the T9 can give better than average service when driven sensibly. However, they do not fair well when abused! A sure sign of problems is a "growling" input shaft bearing. The sooner this is attended to the better. When the input bearing fails it will take with it some, or all, of the gearing making for an expensive repair bill. We can supply individual T9 replacement parts from this list as requested.

from this list as requested.	
<b>Snap Ring-</b> front input shaft (large) M701	\$3.00
<u>Circlip</u> - front input shaft (small) M701A	\$2.00
specify size 2.16, 2.24, 2.33, 2.42, 2.50mm	
<b>Bearing</b> - input shaft roller bearing M702	\$39.50
<i>Input Shaft</i> - for XR4Ti	\$325.00
for Scorpio	\$295.75
<b>Bearing</b> - rear input needle cage M704	\$10.50
<b>Syncronizer Ring-</b> 3rd/4th gear syncro <b>M712</b>	\$28.00
<b>Blocker Spring-</b> syncronizer Z60784	.35c
<b>Snap Ring-</b> specify size below M704A	\$2.00
1.63, 1.74, 1.85mm	
Syncronizer Assembly- 3rd/4th gear syncro unit	\$226.30
<i>Gear</i> -3rd gear	\$175.00
Thrust Ring- retainer 3rd gear	\$2.00
<i>Thrust Washer-</i> thrust washer 1/2 <b>Z61144</b>	\$2.72ea.
<i>Gear-</i> 2rd gear	\$175.00
	Snap Ring- front input shaft (large) Circlip- front input shaft (small) Specify size 2.16, 2.24, 2.33, 2.42, 2.50mm Bearing- input shaft roller bearing Input Shaft- for XR4Ti for Scorpio Bearing- rear input needle cage Syncronizer Ring- 3rd/4th gear syncro Blocker Spring- syncronizer Snap Ring- specify size below 1.63, 1.74, 1.85mm Syncronizer Assembly- 3rd/4th gear syncro unit Gear- 3rd gear Thrust Ring- retainer 3rd gear Thrust Washer- thrust washer 1/2  M701 M702 M702 M704 M704 M704A

/	▲N <i>Syncronizer Ring-</i> 1st/2nd gear <b>M711</b>	\$48.00
1	▲ O <i>Blocker Spring</i> - syncronizer <b>Z61547</b>	.55c
,	▲ P <i>Mainshaft w/Reverse</i> -mainshaft w/reverse gear	\$390.00
t	▲Q <i>Gear</i> -1st gear	\$195.00
t	▲ R <i>Spacer</i> - oil scoop ring	\$3.50
1	▲S <i>Bearing</i> -shaft roller bearing M705	\$38.35
1	▲T <i>Circlip</i> - specify thickness <i>size below</i>	\$4.05
	2.42, 2.48, 2.54, 2.61, 2.67mm	
L	▲U <i>Snap Ring</i> - specify size below M705A	.85c
;	1.75, 1.81, 1.87, 1.93, 1.99mm	
)  -	▲ V <i>Gear</i> - 5th driven gear	\$250.00
•	▲ W <u>Spacer</u> - oil scoop ring	\$1.20
1	▲ X <i>Blocker Spring</i> - syncronizer <b>Z60785</b>	.69c
, 1	▲ Y <i>Syncro Hub</i> -5th gear syncro hub assembly	\$175.50
'	▲ Z <i>Syncronizer Ring</i> - 5th gear M713	\$28.00
١	▲ AA <i>Syncronizer Hub</i> - 5th gear syncro hub	\$150.50
, 1	▲ BB <i>Bearing</i> - roller bearing (1987 and up) <b>M707</b>	
:	▲ BB <i>Bearing-</i> 19mm needle (85-87) <i>21 required</i> <b>M70</b>	<b>7N</b> \$1.89
, 1	<u>Spacer/Washer-</u> (1985-87) 2 to 4 required M707	
, 1	▲ CC <i>Gear Cluster</i> -countershaft gear cluster	\$425.65
,	▲ DD <i>Bearing</i> - roller ball bearing M706	\$74.50
,	▲ EE <u>Circlip</u> - specify thickness <u>size below</u>	\$2.00
'	1.88, 1.95, 2.12, 2.19, 2.25mm	<b>040405</b>
	▲ FF <i>Gear</i> - 5th driver gear	\$184.25
'	▲ GG <u>Nut</u> - countershaft nut (12 sided) M706N	\$5.90
,	▲ HH <u>Countershaft</u> - shaft only Z61892	\$60.50
)	▲ II <u>Gear</u> - reverse idler gear	\$175.20
	▲ JJ Bushing- reverse idler bush	\$5.00
)	▲ KK <i>Idler Shaft</i> - shaft for reverse idler gear	\$30.50



Complete Rear Differential Assembly- New assembled Ford rear differentials with limited slip (3.92:1 ratio). Remove old center section as a whole and replace. Not inexpensive, but a value when you add up the individual component costs and the labor charges on a rebuild. \$1995.00

▲ A *Ford LSD Unit*- as standard on some European Sierra models. For std. 7.5 ring & pinion \$1425.00

**Quaife LSD Unit**- none better for ultimate strength and smooth performance. For std. 7.5 ring & pinion- includes Cosworth size (large) drive flanges. See page 10 for more information on this item.

M710 \$1245.00

▲ B *Crown Wheel & Pinion*- new Ford ring & pinion sets. For automatic (3.36:1), manual (3.64:1), optional (3.92:1). \$550.00

▲ B *Crown Wheel & Pinion*- new Ford Rally Sport 4.44 racing ring & pinion sets. \$995.00

▲ C Bearing & Seal Repair Kit- complete differential housing, bearings, oil seal, o'ring. (each) per side M721 \$94.50

▲ D <u>O'Ring</u>- differential bearing housing o'ring

**M722** \$2.19

▲ E *Oil Seal*- differential bearing housing oil seal M720 \$14.00

▲ F <i>Oil Seal</i> - pinion oil seal	M725	\$34.75
▲ G <i>Flange Nut</i>	M726	\$3.65
▲ H <i>Flange Assembly</i>		\$63.50
▲   <u>Pinion Nut</u>	M727	\$13.05
▲ J <i>Roller Bearing</i>	M723	\$64.00
▲K <u>Crush Collar</u>	M729	\$7.25
▲L <u>Spacer</u>		\$3.75
▲ M Roller Bearing	M724	\$64.00
▲ N Shim- specify size when ordering		\$4.03
Gasket- Rear Differential XR4 & Scorpio	M730	\$8.15
▲○ <u>Differential to Body Mount</u> -XR4	M430	\$99.00
▲○ <u>Differential to Body Mount</u> -Scorpio	G430	\$98.70

Note: most differential components are similar for XR4 and Scorpio.



# **Price List**

Front Sway Bar- Cosworth 28mm M407 Front Strut- Spax Adjustable (each) XR M401A Front Strut- Spax Sport- fixed rate- (each) XR M401V	185.00 174.50 99.00
Front Strut- Spax Adjustable (each) XR M401A	174.50
. , , ,	
FIGHT STRIFT Spax Sport-lixed fate- teach AR 19140 19	
Front Strut- Bilstein-Gas- (each) XR M401B	105.50
Front Strut- Bilstein-Gas- (each) Scorpio G401B	133.50
Front Strut- R/S Adjustable (each) XR M401RS	219.95
Front Strut- Koni Sport (each) Scorpio G401K	199.95
Front Strut- Boge Turbo-Gas (each) XR M401S	99.50
Front Strut- Boge Turbo-Gas (each) Scorpio G401S	109.50
Front Strut- KYB GR2 (each) XR M401Y	95.00
Front Strut- KYB GR2 (each) Scorpio G401Y	95.00
Steering Rack Assembly* (XR)  M434SR	349.00
Steering Rack Assembly* Scorpio G434SR	349.00
*this item requires an additional 100.00 charge refundable upon co	
Steering Rack Bushing H.D. (set)  M434BH	35.50
Steering Rack Boot (left or right) XR & Scorpio M434RB	15.50
Control Arm* (left) XR M428L	75.00
Control Arm* (left) Scorpio G428L	99.50
Control Arm* (right) XR M428R	75.00
Control Arm* (right) Scorpio G428R	99.50
*NEW control arms (ball joints and bushings are installed)	00.00
Adjustable Control Arms (pair) w/bushings DISCON	TINLIFD
Adjustable Control Arms- Race (pair)  DISCON	_
Bushing- H.D. (GPN) Inner Control Arm (each)  M428BH-	
Bushing- H.D. (GPN) Inner Control Arm (each) Scorpio G428BH-	
Bushings- Urethane Inner Control Arm (set)  M428BU	30.00
Bushings- Urethane Inner Control Arm (set) Scoprio G428BU	35.00
Bushing (standard) Inner Control Arm (each) XR C428B	9.50
Bushings*- Urethane Outer Control/Sway (set) M428BK	70.00
Bushings*- H.D. (GPN) Outer Control/Sway (set) M428BK-	
Bushings*(standard) Outer Control/Sway (1 arm pair) M428B *M428B, M428BK & M428BK-N are all suitable for Scorpio	20.00
Washer (shallow)- Sway Bar / Outer TCA (each) M407W	3.95
Tie Rod End (left) XR M434L	27.75
Tie Rod End (right) XR M434R	27.75
Tie Rod End (same L or R) Scorpio G434	27.50
Mount/Insulator -H.D. Upper Strut (each) XR M404	25.50
Upper Strut Mount/Insulator- Scorpio (each) G404	32.95
Upper Strut Rotating Bearing- Scorpio (each) G403	10.45
Upper Strut Rotating Bearing- XR4 (each) M403	11.40
DAGE 2	
PAGE 3 suspension components	F 40.00
Spax Sport Kit -XR M400S	549.00
Bilstein Sport Kit -XR M400B	589.50
Spax Sport Kit (adjustable) XR M400A	735.50
Sport Spring Set (4) front/rear (-25mm) XR M414M	249.00
Sport Spring Set (4) front/rear (standard height) XR M414S	259.00
Sport Spring Set (4) front/rear (-30mm) Scorpio G414M	295.00
Front Spring Scorpio - Standard O.E. Ford (each) G414	122.10
Rear Spring Scorpio - Standard O.E. Ford (each) G415	124.50
Rear Camber Shim Kit -XR M423R	30.00
Front Upper Strut Brace (alloy) XR M403F	189.50
Rear Upper Shock Brace (alloy) XR M403R	169.50
Rear Upper Shock Brace (steel) XR M403RS	95.50

This catalog is viewable and downloadable from our internet site (www.batinc.net) you can get catalog updates there too.

### **IMPORTANT PRICE LIST NOTES: -**

- (1) Scorpio versions of listed XR4 parts will generally appear below XR4 item in *italics*.
- (2) Items that apply for both XR4 & Scorpio are noted.
- (3) Fitment notes, and core charge information is also *italicized*.
- (4) Additional items that do not appear in the literature can be found in with the corresponding category / page number reference. These listings are also *italicized*.

PAGE 4	suspension components-		
Bar Bushing H.D. 25mm		M407BU	20.00
Bar Bushing H.D. 28mm- X	(R4 w/Cosworth bar	M407BAU	20.00
Bar Bushing H.D. 28mm-S	Scorpio	G407BAU	20.00
Front Sway Bar Clamp-	Scorpio (each)	M407C	7.50
Steering Rack Assembly	r* XR	M434SR	349.00
Steering Rack Assembly	r* Scorpio	G434SR	349.00
*this item requires an add	ditional 100.00 charge refundal	ole upon core	return
Steering Rack Bushing	(each)	M434B	8.70
Steering Rack Bushings	H.D. (car set)	M434BH	44.25
Inner Tie Rod (each)-XR		M434TK	51.00
Inner Tie Rod (each)-So		G434TK	60.75
Steering Rack Boot (left		M434RB	16.75
Outer Tie Rod End (left)		M434L	24.50
Outer Tie Rod End (right	,	M434R	24.50
Outer Tie Rod End (sam		G434	27.50
	R4Ti* (integral reservoir)	M434P	135.00
Power Steering Pump X		M434PA	136.00
Power Steering Pump S	•	G434P	136.00
	ditional 25.00 charge refundabl 		
P/S Pressure Hose XR4		M434PH	62.50
Strut Boot/Bump Stop (e	•	M405B	19.00
Strut Insulator/Bearing K	,	M403K	7.00
Upper Rotating Bearing		M403	8.50
Upper Rotating Bearing	Scorpio (each)	G403	9.50
PAGE 5			
Pricing is listed with part	numbers on this pages		
	. •		
	rear suspension		
Rear Sway Bar w/bush-		M408	115.50
Rear Bar End Shackle (e	,	M408S	35.75
Rear Bar End Shackle (		G408S	15.00
	rethane (each) stock XR4	M408BU	6.50
	urethane (each) Cosworth	M408BAU	6.50
Rear Bar Bush (16mm)		G408BU	6.00
Rear Control Arm Set -H		DISCONTIN	
Bushing*- Urethane Outer Co	` ,	M424BO M424BO-N	29.75
Bushing*- GPN Body Be	, ,	M429B	30.50 DISC.
_		M429BU	
Bushing*- Urethane Inne	. Body Beam Mount (each)	M424BI	54.50 29.75
*above bushings also So	` ,	IVI424DI	29.73
Rear Shock- Spax Adjus	•	M402A	104.50
Rear Shock- Spax Adjus		DISCONTIN	
Rear Shock- Spax Sport		M402V	75.00
Rear Shock- Bilstein- Ga		M402B	92.50
Rear Shock -Bilstein (ea		G402B	92.50
Rear Shock- Koni R/S A		M402RS	109.00
Rear Shock- Koni Sport		G402K	122.85
Rear Shock- Boge Turbo	. , ,	M402S	89.50
Rear Shock- Boge Turbo		G402S	65.00
Rear Shock- DeCarbon-		DISCONTII	
Rear Shock- KYB (each)	` '	M402Y	47.50
Rear Shock -KYB (each		G402Y	47.50
	n Scordio	(740/7	4/ 20

ABS Brake Sensor Scorpio/XR4- Rear

# **Price List**



PAGE 7 front brake components_			PAGE 10———— driveline components —		
Front Caliper* (left)- XR & Scorpio	M420CL	64.75	C.V. Joint- XR & Scorpio	M550B	92.50
Front Caliper* (right)- XR & Scorpio	M420CR	64.75	C.V. Boot Kit- XR & Scorpio	M550BK	18.90
M420CL/CR calipers are not supplied with slide pins or bus	shings (availabi	le below)	C.V. Socket Head Cap Screw (6 per joint)	M550CS	1.40ea
Front Caliper Complete* (LH) includes mount & pads	M420CL-L	90.00	C.V. Locking Plate (3 per joint)	M550LP	1.95ea
Front Caliper Complete* (RH) includes mount & pads	M420CL-R	90.00	Axle/Halfshaft Complete* (LH)- XR & Scorpio	M550L	169.50
*this item requires an additional 75.00 charge refundab	le upon core i		Axle/Halfshaft Complete* (RH)- XR & Scorpio	M550R	169.50
Caliper Repair Kit- XR & Scorpio	M420K4A	59.00	*axle/halfshaft, joints (2), boots (2), assembled/greased	ready for insta	allation
Caliper Seal Kit- XR & Scorpio	M420K4	22.50	add 75.00 core charge for this item- refundable on ret	•	
Caliper Slide Bushings (2) does 1 caliper	M420CB	14.00	Driveshaft Coupling- XR & Scorpio	M17A	62.50
Caliper Slide Pins (2) does 1 caliper	M420CP	16.35	Drivesahft Center Support Bearing-XR	M550SB	139.00
Caliper Spring (anti-rattle) each	M420CS	6.39	Drivesahft Center Support Bearing- Scorpio	G550SB	139.00
Front Brake Pad Set* Mintex A/F (Semi-Metalic)	M420AF M420G	39.00 75.00	Quaife LSD	M710	1345.00
Front Brake Pad Set*- Mintex 1144 (street/competition) Front Brake Pad Set*- Mintex 1155 (full competition)	M420G M420G	112.30	Clutch Kit Sachs- XR	M519K	179.50
*brake pads will fit both XR4 and Scorpio	1014200	112.50	Clutch Kit Sachs- Scorpio	G519K	257.50
Front "Low Pad" Sensor Wiring Harness- XR/Scorpio	M420WS	32.49	Clutch Kit Sachs- XR w/ T-5 trans	M519T5	179.50
Front Rotor (standard)- XR (each)	M425	42.50	H.D. Clutch Kit Centerforce (30% kit)	M519C	309.95
Front Rotor (standard)- Scorpio (each)	G425	49.75	H.D. Clutch Kit Centerforce II (50% kit)	M519C2	361.98
Front Rotor (x-drilled)- XR (each)	M425CD	79.50	Clutch Alignment Tool (1" 23 spline)	S11H	6.00
Front Rotor (x-drilled)- Scorpio (each)	G425CD	99.00	Clutch Release Bearing XR	M534	26.50
Front Rotor (Grooved)- XR (each)	M425G	85.50	Clutch Cable- XR4Ti	M562	29.50
Front Rotor (x-drilled & slotted combo)- XR (each)	M425CDS	89.50	Clutch Cable- Scorpio	G562	76.50
Front Rotor (x-drilled & slotted combo) - Scorpio (each)	G425CDS	109.00			
Master Cylinder* XR4 1985-86 (Bendix)- XR	M420MC	109.50			
*this item requires an additional 20.00 charge refund			DACE 11 brake components		
Master Cylinder* XR4 1987-89 (Bendix)- XR	M420MCL	122.50	PAGE 11 brake components	MOFFO	10.70
*this item requires an additional 50.00 charge refund			Brake Fluid AP550 (500 ml)	MC550	10.70
Aeroquip Front Brake Lines (pair)- XR4 (1985-86)	M419	42.50	Brake Fluid Wilwood 570 (355 ml)	MC570	5.95
Front Brake Line O.E. Rubber (each)- XR4 (1985-86)	M419SF	25.75	Brake Fluid Wilwood 570 (6-pack)	MC57-6	33.00
Aeroquip Front Brake Lines (pair)- XR4 (1987-89)	G419	52.40	Brake Fluid Wilwood 570 (24 case)	MC57-C	119.00
Aeroquip Front Brake Lines (pair)- Scorpio	G419 G420SF	52.40 170.75	Front Rotor Cosworth 283 x 24mm (standard)	M426	83.25
ABS Brake Sensor Scorpio/XR4- Front	G4203F	179.75	Front Rotor Cosworth 283 x 24mm (X-drilled)	M426CD	117.50
PAGE 8 brake kits & specials			Front Rotor Cosworth 283 x 24mm (Grooved)	M426G	145.00
Front Brake Special- XR	M420SP	105.00	Rear Rotor Cosworth 273 x 10mm (standard)		45.00
Front Brake Special-Scorpio	G420SP	115.00	Rear Rotor Cosworth 273 x 10mm (X-drilled)		65.00
Front R/S Brake Kit 283x24mm (standard)	M417	319.00	Rear Rotor Cosworth 273 x 10mm (Grooved)		86.50
Front R/S Brake Kit 283x24mm (w/x-drill)	M417A	375.00	Front Rotor Scorpio 260 x 24mm (standard)	G425	49.75
Front R/S Brake Kit 283x24mm (standard/M1144)	M418	349.00	Front Rotor Scorpio 260 x 24mm (X-drilled)	G425CD	99.00
Front R/S Brake Kit 283x24mm M1144/x-drill)	M418A	475.00 699.00	Rear Rotor Scorpio 253 x 10mm (standard)	G425R	39.75
BAT/Wilwood Brake Kit 283mm BAT/Wilwood Brake Kit 300mm	M416W M416W3	099.00	Rear Rotor Scorpio 253 x 10mm (X-drilled)	G425RCD	92.10
DAT/WIIWOOD BIAKE NIL OOOHIIII	101410003		Front Brake Kit- BAT R/S 285 x 24mm (standard)	M418	349.00
PAGE 9 rear brake components _			Front Brake Kit- BAT R/S 285 x 24mm (x-drilled)	M418A	475.00
Rear Wheel Cylinder- XR	M420WC	35.50	Front Brake Kit- Wilwood 283 x 24mm		
Rear Brake Shoe Set (Motorcraft/Mintex)- XR	M420R	64.50	Front Brake Kit- Wilwood 300 x 32mm		
Rear Brake Drum- XR	M420RD	69.50	Front Brake Kit- Wilwood 300 x 32mm (Scorpio)		
Rear Brake Drum (grooved)- XR	M420RDG	DISC	Rear Brake Kit- Wilwood 300 x 21mm		
Aeroquip Rear Brake Lines (pair)- XR	M419R	49.95	Front Wheel Bearing Kit (RH)-XR	M560FR	66.95
Rear Brake Line O.E. Rubber (each)- XR4 (1985-89) Aeroquip Rear Brake Lines (4 line set)- Scorpio	M419SR G419R	27.45 85.00	Front Wheel Bearing Kit (LH)-XR	M560FL	66.95
Rear Brake Hardware Kit- XR	M420K5	43.65	Wheel Bearing Seal F or R- XR	M560S	4.40
Rear Brake Special- XR	M420RSPL		Front Wheel Bearing Kit (RH) Scorpio	G560FR	89.00
Rear Disk Brake Kit- XR	M420RK	724.50	Front Wheel Bearing Kit (LH) Scorpio	G560FL	89.00
Hand Brake Cable- XR	M564	79.00	Rear Wheel Bearing Kit (RH)-XR	M560RR	63.00
Handbrake Cable- Scorpio	G564	77.50	• , ,	M560RL	63.00
Hand Brake Cable- Cosworth	Z16567	69.00	Rear Wheel Bearing Kit (LH)-XR		89.00
Rear Caliper* (specify left or right) for M420RK kit	hla	127.50	Rear Wheel Bearing Kit (RH) Scorpio	G560RR	
*this item requires an additional 75.00 core charge refundar	oie upon core r		Rear Wheel Bearing Kit (LH) Scorpio	G560RL	89.00
Rear Rotor (each) for M420RK kit Rear Brake Pad (set) for M420RK kit		52.50 25.00	Nut- Front Hub (LH) blue	M550N-LF	9.90
Rear Rotor (standard)- Scorpio (each)	G425R	25.00 39.75	Nut- Front Hub (RH) yellow	M550N-RF	
Rear Rotor (x-drilled)- Scorpio (each)	G425RCD	92.00	Nut- Rear Hub (LH) white	M550N-LR	9.90
Rear Caliper (left)- Scorpio (each)	G420RL	124.50	Nut- Rear Hub (RH) white	M550N-RR	9.90
Rear Caliper (right)- Scorpio (each)	G420RR	124.50			
*this item requires an additional 75.00 core charge refunda	able upon core	return			
Rear Brake Pad Set- Scorpio (Semi-Metalic)	G420R	39.00			
ARS Brake Sensor Scornio/XRA- Rear	G420SR	177 25			

G420SR

177.25

# **Price List**

PAGE 12	body work & sheet meta	1	
Front Fender (left)	•	M806L	150.00
Front Fender (right)		M806R	150.00
Inner Wheel Well Splash/L	iner (left)	M808L	175.00
Inner Wheel Well Splash/L		M808R	175.00
Side Blinker Lamp Pair- Cl		M317C	29.95
Side Blinker Lamp Pair- Ti	nt/Smoke Grey	M317S	29.95
Door Skin (left)		M807L	99.50
Door Skin (right)		M807R	99.50
Door Handle XR/Scorpio (I	eft)	M362L	59.50
Door Handle XR/Scorpio (I	right)	M362R	59.50
Door Sill- Rocker (left)		M803L	52.00
Door Sill- Rocker (right)		M803R	52.00
Rear Wheel Arch (left)		M804L	30.00
Rear Wheel Arch (right)		M804R	30.00
Under Battery Repair		DISCONTI	NUED
Battery Tray		M817	33.00
Rear Valance Panel		M815	115.00
Rear Hatch Lock Assembly	(with 2 keys)	M815L	69.50
Cosworth Grille (with Ford	emblem)	M320	229.00
Grille Surround Gasket		M320S	55.10
Cosworth Hood		DISCONTI	NUED
Cosworth Hood Vents (left	& right- pair)	M814	275.00
Cosworth R/S Spoiler Bum	per Kit* (white)	DISCONTI	NUED
Cosworth R/S Spoiler Burn	per Cover (only)	DISCONTI	NUED
•	nps, fog lamps, brackets &	hardware	
Lower flexible "Skirt" for all	·	M353S	89.00
Cosworth R/S 500 Spoiler		DISCONTI	-
	, turn lamps, fog grilles, bra		
Cosworth R/S 500 Spoiler		DISCONTI	
Lower R/S 500" Splitters" (	(pair)	DISCONTI	NUED
PAGE 13	body work		
F.Spoiler Bumper (R/S Cos	•	M353F	395.00
F.Spoiler Bumper (R/S 500	-	M353FA	449.00
Turn Lamp- Cosworth Burn			38.50
Turn Lamp- Cosworth Burn			38.50
Clear Turn Lamps (pair) fo		M315C	59.00
Fog Lamp- Cosworth Bum	•	Z60988	86.30
Fog Lamp- Cosworth Bum	'	Z60966	86.30
Rear Bumper- Fiberglass			395.00
Rear Wing/Airfoil (R/S Cos	worth) Fiberglass	M306F	409.00
Rear Wing/Airfoil (R/S 500		M306FA	475.00
Rear Deck Spoiler (R/S 50		M306L	149.00
Wheel Arches (4) &	,		
, ,	S Cosworth) Fiberglass	M302F	479.00
Hood (R/S Cosworth) inclu			395.00
Hood Vent Louvers (2) Fib		M814F	175.00
Hood Vent Louvers (2) Plas	tic- non functional stick-ons	M814S	65.50
	are memoral enterior enterior		00.00

EAT CONTROL OF THE PARTY OF THE	BAT "Faster Fords" tee shirts (large & x-large sizes) gray color \$8.95

PAGE 14 trim & lighting		
Sierra Emblem	M321S	26.50
Sierra XR4i Sticker (red)	M352R	11.15
Sierra XR4i Sticker (anthracite/gray)	M352A	11.15
Sierra R/S Emblem	M321RS	37.50
Cosworth Emblem	M321C	24.95
Sierra R/S Cosworth Sticker	M352C	19.65
R/S Emblem	M352RS	17.50
Ghia Emblem (crest)	M352G	25.75
Ghia Emblem (script) -rear deck lid on Scorpio	G352G	17.25
2.9i Emblem -rear deck lid on Scorpio	G352L	23.95
Scorpio Emblem- rear door sail panel	G352S	15.75
Ford Emblem	C321	18.00
Sierra Eurolamp Kit- lamps, bulkheads, bulbs	M318	369.00
Sierra Eurolamp (left) lamp only	Z61657	150.00
Sierra Eurolamp (right) lamp only	Z61656	150.00
Replacement (LHD) Lens (left)	Z611466	99.50
Replacement (LHD) Lens (right)	Z611467	99.50
Scorpio Euro Lamp Kit- lamps, grille, turn lamps, bulbs	G318	649.00
Fog Lamp Scorpio (left)	G349L	65.00
Fog Lamp Scorpio (right)	G349R	65.00
Bulb H4 55/60 watt	Z H455/60	4.00
Bulb H4 55/100 watt	Z H455/100	8.79
Bulb H4 80/100 watt	Z H480/100	15.00
Bulb H3 55 watt	Z H355	4.00
Bulb H3 100 watt	Z H3100	8.79
Bulb 880 50 watt "Blue Ion" (for XR4Ti fog lamps)	Z 880/50	8.79
Bulb 9004 "Bright White" 45/65 watt	Z 9-45/65W	11.00
Bulb 9004 55/100 watt	Z 9-55/100	10.98
Bulb 9004 80/100 watt	Z 9-80/100	12.98
Bulb 9004 "Blue Ion" 55/100 watt	Z 9-55/100E	3 12.98
Relay (Hella #87118) 12 volt	Z Relay12	14.10
Tail Lamp Seal (each)	M319S	17.00
Tail Lamp Socket (each)	M319LS	42.25

### PAGE 15-16 \_\_\_\_\_ wheels

Pricing is listed with part numbers on these pages

PAGE 17	_ accessories		
Scorpio Cowl Cover		G369C	39.00
Floor Mat Set (front) XR4 & Sc	orpio	M1010	30.50
Floor Mat Set (rear) XR4		M1011	20.50
White Face Gauge Set XR4		M341W	115.00
Instrument Panel Bulb (each)		M330L	4.75
Warning Lamp Bulb (each)		M330WL	3.50
Torch Key & Battery XR4		M309KL	14.25
Torch Key Blank XR4		Z61179	6.50
Lamp & Battery XR4 & Scorpio	)	M309KLB	9.85
Standard Key XR		M309K	8.25
Ignition Lock Assembly (w/ 2 kg	eys) XR	M350L	85.00
Door Lock Assembly (w/ 2 keys	s) XR	M340L	65.00
Rear Hatch Lock Assembly (w/	2 keys) XR	M815L	69.50
Rear Hatch Striker		M815S	9.95
Hatch Lock Retaining Clip		M815C	2.15
Window Switches XR		M340S	71.05
Window Switch Scorpio		G340S	55.50

# **Price List**



PAGE 18 accessories			PAGE 21 cooling system (XR4)		
Dash Cover/Overlay -XR4	M323	99.50	Hose- heater valve to pipe (to oil cooler)	M421HC	16.50
Dash Cover/Overlay -Scorpio	G323	131.25	Hose- heater valve to heater core	M421H	8.90
ECU Cover R/S Cosworth	M324	89.00	& pipe (front) to thermo housing		
Key Blank "Chubb" Scorpio	G309KE	7.50	Hose- heatervalve to pipe (upper @ rear)	M421HB	11.45
Torch Key Blank "Chubb" Scorpio	Z61664	7.50	& oil cooler to pipe		
Key Blank "Tibbie" Scorpio	G309K	7.50	Heater Valve- XR & Scorpio	M421V	78.00
Torch Key Blank "Tibbie" Scorpio	Z64948	7.50	Hose- water pipe to oil cooler-over v. cover	M421HE	29.00
Lamp & Battery- XR4 & Scorpio	M309KLB	9.85	Hose- oil cooler to intake mfld.	M421HD	7.95
Book- Complete 2.3 EEC-IV Handbook	M209	19.00	Oil Cooler	AWC1	DISC
Rear Lamp Set (clear) XR4	M319C	199.00	Hose- pipe @ front to water pump	M421HA	11.50
Rear Lamp Set (tinted) XR4	M319T	199.00	Hose- pipe @ front to thermo housing	M421H	8.90
, ,			Thermostst Housing- H.D. cast iron	L2F	27.50
PAGE 19 accessories Alignment Leading Switch (Stalls) VD4	Maga	152.00	Water Pump (new) Water Pump (recon)	L6A L6AR	73.10 35.00
Windshield Wiper Headlamp Switch (Stalk)- XR4 Turn Signal Flash/Hazard Switch (Stalk)- XR4	M304 M305	153.00 169.15	Hose- radiator lower 85-88(MT & auto)	M421BH	29.00
Fuse Box Cover- XR4	M474	19.75	Hose- radiator lower 1989 (MT & auto)	M421BH9	33.50
Door Post Black-Out Trim (left)	M340TL	29.95	Hose- radiator upper 85-88 (MT & auto)	M421TH	18.50
Door Post Black-Out Trim (right)	M340TR	29.95	Hose- radiator upper 1989 (MT & auto)	M421TH9	64.50
Pedal Pad- Accelerator XR & Scorpio	M365A	5.95	Hose- expansion tank (top fitting) tovalve cover pipe	M421TT	11.45
Pedal Pad- Clutch XR & Scorpio	M365C	8.25	Coolant Tank1985-88* (with level sensor bung)	M421E	63.00
Pedal Pad- Brake (manual) XR & Scorpio	M365B	8.25	Coolant Tank 1989* (without sensor bung)	M421E9	DISC
Pedal Pad- Brake (automatic) XR & Scorpio	M365BA	8.25	*coolant tanks require Scorpio thread-on cap use G4	121C	
Rear Hatch Lift Strut (each)- XR4	M308	30.00	Coolant Tank Thread-on Cap (for above tanks)	G421C	7.35
Rear Hatch Lift Strut (each)- Scorpio	G308	31.50	Water Level Sensor (in radiator surge tank) XR4	M421LS	69.70
Rear View Day/Night Mirror- XR4 & Scorpio	M339	78.50	Tank Gromet, Spacer Ring, Lock Collar (for above sensor)	M421SK	9.40
Replacement Stick-on Pad for Rear View Mirror	M339S	3.89	Hose- expansion tank (middle fitting) to radiator	M421TM	11.50
			Hose- expansion tank (lower fitting) to radiator drain line		29.00
PAGE 20 books			Hose- expansion tank to W/Pump (automatic "Y" hose)		45.00
The Sporting Fords- Sierra	M207	32.50	Radiator XR4Ti- 85-88 (MT) Radiator XR4Ti- 1989 (MT)	M421R M421R9	250.00 295.00
High Performance Sierras & Merkurs	M206	37.25	Radiator XR4Ti- 1969 (MT) Radiator XR4Ti- 85-88 (Auto)	M421R9	289.00
How to Prepare the Sierra for Motorsport	DISCONTI		Radiator XR4Ti- 1989 (Auto)	M421R9A	329.00
European Sierra Workshop Manual	M204	33.75	Mount/Bushing (radiator top)	M421RM	8.25
European Sierra XR4i 2.8L Workshop Manual	M204A	32.00	Electric Fan 16" (puller)	A16F-PL	89.00
European Scorpio/Granada Workshop Manual	G204	34.00	Thermostatic Fan Relay (170-210f adjustable)	AFTR1	55.00
The Complete 2.3 Turbo EEC-IV Handbook	M209	19.00	Blower Motor & Fan- A/C & heater	M470A	249.00
Shop Manual CD- Merkur XR4Ti	M204CD	39.95	Heater Core	M471	89.50
Shop Manual CD- Merkur Scorpio	G204CD	39.95	Hose- Hi-temp silicone (1 foot length- makes 3 hoses)	M421WT	7.00
Chop manda 62 mondi ecolpie	020102	00.00	Hose- Lower drain pipe @ radiator lower (MT)	M421HF	8.50
OTHER FORD CAR & ENGINE RELATED BOO	KS & MANUA	ALS	PAGE 22 cooling system (Scorpio)_		
Workshop Manual- Fiesta 1.6L	C204	20.00	Hose- heater valve (out) to core	G421HA	13.50
Workshop Manual- Escort 1.6/1.9L	E204A	12.50	Hose- heater valve to engine	G421HB	17.50
Tuning/Building Ford "KENT" Series Engines	F202	29.50	Hose- heater valve (inlet) to core	G421HC	13.95
Building Formula Ford 1600 Engines	F203	32.00	Hose- heater valve to pipe	G421HD	DISC.
Tuning/Building Ford 2.0 SOHC and DOHC Engines		25.75	Radiator (automatic)	G421RA	289.00
Tuning/Building Ford V6 Engines	G202	17.50	Radiator (manual)	G421R	289.00
Workshop Manual- Pinto/Bobcat 2.0/2.3L	S203	12.50	Hose- tank to thermstat housing	G421HF	14.70
2000 OHC "Pinto" Engine Performance	S204	27.95	Hose-upper radiator	G421TH	35.00
<del>G 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 </del>			Hose- tank to water pump	G421HH	33.60
			Water Pump (new)	G421	139.00
TOOL BLUE			Water Pump (recon)	G421A G421HP	64.50 27.80
OL BL			Hose- bypass/ water pump outlet to inlet mfld.  Hose- lower radiator	G421HP G421BH	27.80 28.35
			1105E-10WEI IAUIAIUI	G42 I DIT	20.33



<u>Scorpio Performance Air Filters</u> Similar to K&N in all but price. Features high-flow, cleanable, cotton-gauze element. Made in Europe JR Filters, marketed by Accel under their *Kool Blue* brand.

**Scorpio Performance Air Filter** 

K22P

\$39.00

PAGE 22 cooling system (Scorpio) _		
Hose- heater valve (out) to core	G421HA	13.50
Hose- heater valve to engine	G421HB	17.50
Hose- heater valve (inlet) to core	G421HC	13.95
Hose- heater valve to pipe	G421HD	DISC.
Radiator (automatic)	G421RA	289.00
Radiator (manual)	G421R	289.00
Hose- tank to thermstat housing	G421HF	14.70
Hose- upper radiator	G421TH	35.00
Hose- tank to water pump	G421HH	33.60
Water Pump (new)	G421	139.00
Water Pump (recon)	G421A	64.50
Hose- bypass/ water pump outlet to inlet mfld.	G421HP	27.80
Hose- lower radiator	G421BH	28.35
Hose- lower radiator (late 89) w/tee off hose	G421BH-9	52.00
Hose- to oil cooler pipe	G421HK	21.30
Hose- oil cooler pipe to oil cooler	G421HL	18.20
Coolant Tank (late style 6-88>2-92) rectangular shape	G421TL	64.50
Coolant Tank (early style > 6-88) curved side	G421TE	64.50
Coolant Tank Cap (thread-on) Scorpio & late XR4	G421C	7.35
Oil Cooler	AD1000	DISC
Heater Control Valve- XR4 & Scorpio	M421V	78.00
Heater Core- Scorpio	M471	89.50
Mechanical Fan Clutch Assy	G422	269.00
Electric Fan 16" (puller)	A16F-PL	89.00
Thermostatic Fan Relay (170-210f adjustable)	AFTR1	59.00
Blower Motor & Fan- A/C Heater (Scorpio)	G470H	249.00

PAGE 23 cooling system (Scorpio) _	C121U1	10 F/
Hose- heater valve (out) to core	G421HA G421HB	13.50 17.50
Hose- heater valve to engine Hose- heater valve (inlet) to core	G421HC	13.95
Hose- heater valve to pipe	G421HD	22.60
Heater Control Valve- XR4 & Scorpio	M421V	69.00
Hose- coolant pipe to oil cooler from heat valve	G421HL	18.20
Oil Cooler- oil to water heat exchanger	AD1000	DISC
Hose- oil cooler to coolant pipe	G421HM	18.00
Hose- coolant pipe from oil cooler to water pump	G421HK	21.30
Hose- bypass/ water pump outlet to inlet mfld.	G421HP	27.80 -
Hose- upper radiator (late 89) w/vent	G421TH-9	35.00
Hose- coolant tank to thermo housing	G421HF-9	16.45
Tank Lever Sender	M421LS	69.70
Lever Sender Install Kit	M421SK	9.40
Cap/Plug- Rubber Hose- lower radiator (late 89) w/tee off hose	G421P G421BH-9	2.50 52.00
Coolant Tank (6/88>89) Oval Type -USE G421TL	G421B11-9	DISC
Coolant Tank (late style 6-88>2-92) rectangular shape	G421TL	64.50
Radiator Cap (thread-on) Scorpio & late XR4	G421C	7.35
PAGE 24 A/C system Evaporator- (XR4 & Scorpio)	M470E	245.75
Expansion Valve - (XR4 & Scorpio)	M470EV	46.50
Blower Motor - (XR4) O.E. Ford	M470A	259.00
Blower Motor - (Scorpio) O.E. Ford	USE	M470
Refrigerant Hoses*- (XR4Ti only)	M470H	149.00
Refrigerant Hoses*- (Scorpio)	G470H	149.00
*this item requires an additional 100.00 charge refunda		
Compressor- (XR4 & Scorpio) includes clutch	M470C	429.00
Clutch Assembly*- (XR4 & Scorpio) *this item requires an additional  25.00 charge refundal	M470CL	157.50
Condenser- (XR4)	M470D	335.00
Condenser- (XIC4) Condenser- (Scorpio)	G470D	335.00
Electric Condenser Fan- 16" Pusher (XR4 & Scorpio)	A16F-PU	89.00
Fan Mounting Tie Set (for above fan)	ABKT1	7.95
3-way Pressure Switch- (XR4 & Scorpio)	M470S	90.00
Receiver/Dryer- (XR4 & Scorpio)	M470R	108.00
Receiver/Dryer- (XR4 & Scorpio) O.E. Ford	M470R-F	131.50
PAGE 25 turbo components		
Wastegate Actuator* -Reman.	M521WR	
this item requires an additional 30.00 charge refundab		
Turbo/Reman* (specify auto or 5-speed)	M522TR	649.00
Performance Turbo*	M522TM	
this item requires an additional 100.00 charge refunda	•	
Intercooler Kit		1245.00
Adjustable Boost Kit	M521BV	49.95
Wastegate Actuator (adjustable rod- dual port)	M521WA2	139.00
Cockpit Mount Adjustable Boost Kit (remote valve)	M521TB	94.50
Turbo Oil Feed Pipe	M522P	21.50
Turbo Inlet Hose (45 degree elbow)	M22H	44.50
Turbo Base Gasket	L521GT	8.75
┌ Coming Soon !		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		

PAGE 26 engine & related		
Main Bearing Set (STD)	L16A	32.65
Main Bearing Set (+.010")	L16B10	32.65
Main Bearing Set (+.020")	L16B20	32.65
Main Bearing Set (+.030")	L16B30	32.65
Rod Bearing Set (STD)	L16H	16.35
Rod Bearing Set (+.010")	L16110	16.35
Rod Bearing Set (+.020")	L16120	16.35
Rod Bearing Set (+.030")	L16130	16.35
Cam Bearing Set	L16M	18.50
Cam Bearing Set- grooved	L16MA	18.50
Aux. Shaft Bearing	L5DC	10.50
Connecting Rod Bolt Set H.D. (standard 2.3 rod)	L4FS	44.30
Connecting Rod Bolt Set H.D. (5.7" Chevy rod)	L4FSC	35.00
Head Stud Set H.D.	L2DS	98.40
Main Stud Set H.D.	L2KS	89.20
Full Gasket Set (complete engine) Felpro	L15AA	95.00
Top End Gasket Set Felpro	L15BA	55.50
Bottom End Gasket Set (block, crank & sump) Felpro	L15CA	40.10
Pan Set- sump rails & seals (cork)	L15CP	22.05
Head Gasket H.D. (Ford Motorsport turbo style)	DISCONT	INUED
Head Gasket H.D Felpro	L15DA	19.50
Head Gasket Competition (extreme duty racing gasket)	L15DR	29.50
Head Space Shim .020"	L15DS	17.85
Valve Cover Gasket (standard cork)	L15E	6.75
Valve Cover Gasket H.D. 2300 (hi-temp rubber)	L15EA	24.00
Valve Cover Gaskets H.D. 2.9L V6 (hi-temp rubber)	G15EA	15.50
Intake Manifold Gasket Set	L15FA	11.40
Water Outlet Gasket (thermostat housing)	L15N	CALL
Water Pump Gasket (pump to block)	L15P	CALL
Crankshaft Rear Seal	L15Q	CALL
Camshaft Seal	L15R	8.25
Auxiliary Shaft Seal	L15S	9.25
Crankshaft Front Seal	L15T	16.08
Inlet Hose- Turbo to T.Body (silicone blue)	M22H	44.50
Performance Exhaust System 3" (full system)	M522	705.00
Performance Exhaust System 2.5" (down pipe w/cat back)	M522B	425.00
Exhaust Down Pipe 3"	M522DP	169.00
Exhaust Manifold (standard cast Fomoco)	M521	235.00
Exhaust Header 2.3 Turbo (tubular stainless steel)	L521T	659.00
Gasket- turbocharger to manifold (stainless)	L521GT	8.75
Exhaust Hanger (rubber donut) each	M522H	5.25

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94.50	Tra
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44.50	Be
8.75	Be
3.70	Be
	Be

Wheel Spacer Kits for XR4

PAGE 27 engine & rela	ted	
Air Filter- XR4Ti (2.3L Turbo)	M22P	39.90
Air Filter- Scorpio (2.9L V-6)	G22P	40.75
Mylar Fyre Foil Sleeve -10 (7/8" I.D.) per foot	320510	4.55
Mylar Fyre Foil Sleeve -12 (1" I.D.) per foot	320512	4.90
Mylar Fyre Foil Sleeve -16 (1 1/4" I.D.) per fo	ot 320516	5.64
Mylar Fyre Foil Sleeve -20 (1 1/2" I.D.) per fo	ot 320520	6.32
Motor Mount Insulator (left or right same) XR-	each M433	99.95
Motor Mount Insulator (L or R same) Scorpio-	- each G433	124.00
Transmission Mount/Insulator- Scorpio	G433T	55.00
Transmission Mount/Insulator H.D Scorpio	G433TA	78.00
Transmission Mount Insulator (round) XR4	M433T	79.00
Belt- XR4Ti (1985-89) W. Pump, Alt, P. Steer	ring M6G	16.45
Belt- XR4Ti (1986-89) A/C Comp.	M6H	13.45
Belt- XR4Ti (1985) A/C Comp.	M6HA	13.45
Belt- Scorpio (1988-89) Fan & Power Steering	g G6G	16.40
Belt- Scorpio (1988-89) Alternator	G6GA	15.50
Belt- Scorpio (1988-89) A/C Comp.	G6H	12.60
Ignition Wire Set- XR4Ti (8mm)	L9HT	42.50
Ignition Wire Set- XR4Ti (8.5mm KV85 wire)	M9HT	74.50
Ignition Wire Set- XR4Ti (10mm R-100 wire)	M9HTR	85.50
Ignition Wire Set- Scorpio (8mm)	G9HT	55.75
Ignition Wire Set- Scorpio (8.5mm KV85 wire)	G9HT9	95.75

07/11/05

**PAGE 33-34** 

Pricing is listed with part numbers on these pages



### Pages 28-30 Pricing is listed with part numbers on these pages PAGE 31 engine & related Distributor Cap H.D. 2.3L L9B 19.45 Distributor Cap H.D. 2.8L V6 G9B 26.50 Distributor Rotor H.D. 2.3L (85-86 screw-down type) 19F 7.95 Distributor Rotor H.D. 2.3L & V6 (87-89 push-on type) L9FA 11.75 TFI Module 2.3L -Motorcraft XR & Scorpio L9M 85.50 Distributor\* 2.3L L9AB 119.00 \*this item requires an additional 35.00 charge refundable upon core return Distributor\* 2.9L V6 G9AB 110.25 \*this item requires an additional 55.00 charge refundable upon core return Computer\* XR4Ti (specify auto or manual) DISCONTINUED Computer\* Scorpio (specify auto or manual) DISCONTINUED \*this item requires an additional 75.00 charge refundable upon core return Electric Fan Switch -XR M450FS 31.95 Knock Sensor -XR M450KS 65.00 Engine Coolant Temp. Sensor (ECT) -XR & Scorpio M450EC 34.50 Idle Speed Sensor (Air Bypass Valve) -XR & Scorpio M450IS 89.00 Throttle Position Sensor (TPS) -XR (order with year) M450TP 49.00 Oxygen Sensor -XR M450OS 60.50 Oil Pressure Switch -XR M450P 7.75 Water Temp Gauge Sender (purple band) -XR DISCONTINUED Air Charge Temp Sensor (ACT)- Scorpio G450A 29.25 Coolant Temp. Sensor (ECT)- XR & Scorpio 28.45 M450FC EGR Valve- XR4 148.70 M450EGR MAP Sensor -Scorpio 97.50 G450M Oil Pressure Switch -Scorpio G450P 8.25 G450OS Oxygen Sensor -Scorpio 137.50 Vehicle Speed Sensor- Scorpio DISCONTINUED Throttle Position Sensor- Scorpio G450TP 153.00 A/C Compressor -XR & Scorpio M470C 449.00 Alternator\* -XR M24A 235.00 Alternator \*-Scorpio G24A 235.00 \*this item requires an additional 10.00 charge refundable upon core return Starter\* -XR M23A 87.50 Starter\* -Scorpio G23A 220.00 \*this item requires an additional 30.00 charge refundable upon core return Fuel Injector 35lb. XR4Ti (Brown Top) reman DISCONTINUED Fuel Injector 35lb. (Disk Type) new DISCONTINUED Vane Air Meter\* 50mm (T-Bird) L7V 164.50 Vane Air Meter\* 65mm (SVO) L7VA 175.00 L7VM 255.00 Vane Air Meter\* XR4Ti Standard \*this item requires an additional 75.00 charge refundable upon core return Fuel Pressure Regulator -XR M7PR 59.00 Electric Fuel Pump- XR (high pressure) in line M<sub>10</sub>A 165.00 125.00 Electric Fuel Pump- XR (low pressure) in tank M<sub>10</sub>AT PAGE 32 \_ transmission related M703 Oil Seal- input shaft (front) T9 15.45 Gasket- input bearing retainer to main case T9 M702G 2.95 Gasket- top cover T9 M716 6.75 Oil Seal- extension housing (tail shaft) T9 11.80 M719 Gasket- adaptor plate (bearing carrier) to main case T9 M709 5.90 Gasket- adaptor plate (carrier) to ext. housing (tail) T9 M708 Short Shift Kit M715 59.00 Shifter- competition gear lever (shifter) assembled M717 119.00 Torco Gear Oil (quart) C2S 12.95 Quadrant & Pawl Kit M368 22.45 Manual Clutch Adjuster Kit M368A 99.50

NEW ITEMS Too Late to Classify		
Valve Cover Gaskets H.D. 2.9L V6 (h.d. rubber)	G15EA	15.50
Head Gasket 2.9L V6 (RH)	G15DR	22.50
Head Gasket 2.9L V6 (LH)	G15DL	22.50
Main Bearing Set 2.9L V6 (specify size)	G16A	53.10
Rod Bearing Set 2.9L V6 (specify size)	G16H	31.05
Weather Seal - Rear Hatch to Body -Scorpio	G340HS	119.00
Electric Window Switch (door/console)- Scorpio	G340S	55.50
Rear Sensor Wiring (low pad warning) Scorpio	G420SWF	₹ 39.45
Rear Muffler- Scorpio	G522T	89.00
Vacuum Modulator- A4LD Auto Trans	G750M	26.00
Weather Seal- Rear Hatch to Body- XR	M340HS	79.90
Moulding/Seal Front Windshield-XR	M340F	54.50
Weather Seal- Sunroof Opening- XR	M340SR	119.00
Ignition Switch (Electrical)- XR	M350A	41.75
Plastic Rivet- for exterior body cladding- XR	M366R	.90
Wiper Link Arm (long) ties L & R arms- XR	M369	14.35
Wiper Motor Link Arm (short) XR	M369A	14.35
Front Sensor Wiring (low pad) XR & Scorpio	M420SW	32.50
Bushing- Body Beam Mount Standard	M429	36.00
PCV Valve- XR	M450V	6.00
Rotary Fan Switch HVAC- XR	M470FS	60.00
Rear Wheel Bearing Carrier- XR	M550BC	96.25
Rear Stub Axle (LH) XR & Scorpio	M550SL	129.00
Rear Stub Axle (RH) XR & Scorpio	M550SR	129.00
Transmission Shift Rail Bushing (in case)	M718	2.55
Transmission Shift Bushing (on shaft @ shifter)	M715B	2.95
Vacuum Modulator- C3 Auto Trans	M750M	26.00

NEW ITEMS Too Late To Classify



Bilstein T/C Series Struts & Shocks- offer genuine Bilstein quality and technology with features like; twin tube high pressure gas design (for precise handling and control), hard chrome piston rod, multi stage valving with self adjusting piston. Performance exceeds all original equipment specifications. Struts/shocks are available for both XR4 and Scorpio. We highly recommended them for adding a more "sport tuned" feel to either car. (priced each)

Bilstein Front Strut- XR	M401B	\$105.50
Bilstein Front Strut- Scorpio	G401B	\$133.50
Bilstein Rear Shock- XR	M402B	\$92.50
Bilstein Rear Shock- Scorpio	G402B	\$92.50



GAZ Adjustable Dampers- If you are looking for high end quality and performance at a sensible price- look no further. GAZ shocks are adjustable-fronts 24 position (top adjust) for rebound, rears 34 position (lower side adjust) 70% rebound / 30% bump. Strut rods are shortened (for use with lower ride height springs) with increased diameter, hardened chrome piston.. Double lip seals on piston/rod assures longevity. Strut exterior casings and other exposed parts are zinc plated to minimize corrosion. On assembly, all dampers are individually serial numbered, inspected, then "dyno" tested (with performance graph supplied). GAZ products are all manufactured to ISO 9002 specification, and are TUV approved with a 3 year warranty. If you are looking for high end quality and performance at a sensible price, look no further than GAZ. Front struts are available with fixed (standard type) spring seat or threaded body adjustable (coil over type) spring seat. Priced as each- for XR only.

GAZ Front Strut (fixed seat)	M401G	\$174.50
GAZ Front Strut* (coil over)	M401GC	\$285.00
*for use with 2 1/4" i.d. spring		
GAZ Rear Shock	M402G	\$105.00



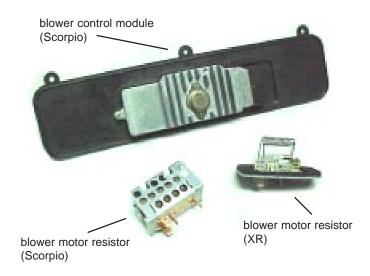
**SVT Brake Kit-** This is the perfect brake upgrade for anyone looking to replace stock XR4 rotors, and calipers. Kits feature larger 283mm Contour SVT type rotors for increased brake leverage (stock is 260mm), lightweight twin piston PBR aluminum calipers (keeps unsprung weight to a minimum), larger brake pads (increased contact area), Aeroquip braided steel over Teflon brake hoses (reduce spongy pedal feel), and custom machined brackets & hardware. Specify year when ordering. Fitment with 15"-16" aftermarket wheels and stock 15" Ford "basket weave" wheels, not stock flat spoke type.

283mm SVT Brake Kit M416SVT \$545.00



Air Door Components- There are two common replacement items associated with the function of the fresh air door on the XR4. These are the Air Door Valve and Vacuum Reservoir located near the battery. The HVAC system allows the choice of recirculating inside air or bringing in exterior air which is regulated by the air door. The door is vacuum operated, controlled by a valve, and usually defaults open. If you are experiencing cold air intrusion all the time it is usually the valve which operates the door. If after a period of time the door creeps open or is intermittent with engine speed check the reservoir tank or the hoses for vacuum leaks.

Air Door Valve M470V 44.80 Vacuum Reservoir Discontinued



<u>Fan Speed Controls</u>- If the HVAC fan is only functioning at one speed it likely that the fan/blower motor resistor has failed. The XR4 uses a simple and cheap resistor unit that plugs in near the lid of the air box. The Scorpio uses one of two types. The first is similar to the one used on the XR and the other is a more elaborate and expensive electronic module. Check what type you have before ordering.

Blower Motor Resistor- XR M470BR 47.15 Blower Motor Resistor- Scorpio G470BR 42.00 Blower Control Module- Scorpio Discontinued



# Merkur Related Overstocks & Specials

Updated 06/23/05



### A/C Compressors

If you haven't gotten around to fixing that broken A/C compressor, here is an example of how procrastination can pay off. The best deals on A/C repair parts always come around during the winter months, and we have a special on re-manufactured compressors at less than wholesale pricing. *Units are supplied without clutch. Quantities limited, less than 30 available.* 

Reman. A/C Compressor

**M470CR** 

\$179.00



### Ignition Wire Sets XR4ti & Scorpio

Here is a deal on custom length XR4ti or Scorpio wire sets by Wells. Sets are assembled with 8mm RFI supression type wire and include primary wires (either 4 or 6) and coil wire. These sets are really quite nice and are considered a steal at only \$19.50. *Supplies limited, less than 60 sets available.* 

G9WS

Ignition Wire Set XR4
Ignition Wire Set Scorpio

SOLD OUT

\$19.50



### **Belt & Tensioner Special**

Cam belts should be replaced every 40K. Most cars still have their original tensioner in service, even if the belt has been replaced numerous times. Here is your chance to save on new belt tensioners and belts. An \$85.00 value -SAVE \$35.50. (while supplies last)

Tensioner & Belt Special

L5K

\$49.50



### Hose Kits 1985-88 XR4ti

Most, if not all, XR4ti water hoses have been discontinued by Ford. We have undertaken reproduction of the standard hoses, bend for bend, for correct fit and performance. We can supply hoses as individual items (roughly 15 pieces) or as a complete hose set. Purchase a kit and get all the replacement rubber hoses for either the XR4ti 1985-88 w/5-speed or 1985-88 automatic at a reduced cost, and the convenience of ordering one part number. (save 25.00 over individual part price)

Hose Kit 1985-88 XR4ti (5 speed) M421K \$199.50 Hose Kit 1985-88 XR4ti (automatic) M421KA \$199.50



### Front Lower Control Arms

Here is a popular item, in fact they are one of our best sellers. New lower control arms assembled complete with ball joint, inner & outer (castellated type) bushings. Our (already low) regular price on XR4 control arms are \$75.00 each and Scorpio arms at \$99.00 each. This deal is buy 1 arm and get the other at 1/2 off (a 25% savings).

Control Arm (pair) XR4 M428PR \$112.50 Control Arm (pair) Scorpio G428PR \$148.50





Tie rod ends should be replaced when they show wear or more commonly when replacing other front end components. Getting it all done once and only paying for one alignment does make sense. Buy one at regular price \$24.00 (XR4) \$28.00 (Scorpio) and get the other 75% off.

Tie Rod End Outer (Pair) XR4 M434PR \$30.00 Tie Rod End Outer (Pair) Scorpio G434PR \$35.00



# Merkur Related Overstocks & Specials

**Updated 06/23/05** 



### Steering Rack Boots

By this point in time almost all XR's and Scorpios need to have their rack boots replaced. Rips or cracks in the boot will allow dirt and grime in and damage the steering rack. We offer a high quality rubber steering rack boot with clamps included. The regular price on boots is \$15.00 each. Save \$5.00 on the pair.

Steering Rack Boots (pair) XR & Scorpio M4

**M434RP** 

\$25.50



### Inner Tie Rods

Inner tie rods should be replaced when the socket end shows wear or more commonly when replacing other front end components. Getting it all done once and only paying for one alignment does make sense. We make it easy to subscribe to that way of thinking. Buy one at regular price \$50.00 (XR4) and get the other 75% off. Sorry, no Scorpio version on this deal.

Inner Tie Rods (Pair) XR4

M434TP

\$62.50



### Automatic Transmission Filter Special

These came to us in a surplus parts deal. Name brand automatic transmission filter kits at 25-50% off the usual parts counter price. Change the filter and keep your automatic transmission in top condition. *Quantities are limited.* 

Transmission Filter Kit XR4Ti (C3) M740F \$11.75 Transmission Filter Kit Scorpio (A4LD) G740F \$24.75



### EGR Valves

With Ford list price (before they were recently discontinued) at \$325.00, EGR valves are not an easy item to obtain at a reasonable price. We contracted a manufacturer to do some for us, and can offer them at better than 50% off.

**EGR Valve XR4Ti** 

**M450EGR** 

\$149.00



These are the coolant pipes that run along the valve cover. Long since available from Ford, we now have these replicas.

Upper Coolant Pipe w/tee offs M421PU \$63.00 Lower Coolant Pipe M421PL \$43.00





### Speedometer Cables NEW &

Speedometer cables for non-cruise control XR4Ti, available for either automatic, or manual transmission equipped cars.

Speedo Cable (MT) M735M \$64.90 Speedo Cable (Auto) M735A \$64.90



Another Ford discontinued item; we now have replica "Y" coolant hoses for automatic transmission XR's. Stock fit, uses brass block at tee.

Y Coolant Hose M421Y \$39.00



## Terms of Business

### Hours of Operation

Order desk hours are Monday through Friday 9:00 a.m. until 5:00 p.m. Eastern Time. Whenever possible orders received before 12:00 noon will be processed and shipped the same day. If anyone would like to visit our location we would like to request that you please make an appointment before dropping by. We enjoy seeing our customers, discussing their cars, and showing them our latest developments, however, some days or times of day are better for us to give the attention we like to offer.

### **Ordering Procedure**

You may place an order by telephone, fax, or by mail. Ordering by telephone will connect you to a technical-sales advisor who will help with any questions, or make ordering recommendations, if you require. Knowing your 6 digit BAT customer number, catalog part numbers, quantities, and description of order items will help minimize any possible errors in processing your order. Telephone orders may be placed during business hours as listed above. Fax orders may be placed anytime day or night.

### **Payment**

Payment may be made by Visa, Master Card, Amex, Money Order or Personal Check. Orders which have been paid for by Personal Check will be shipped only after the check has cleared (allow up to 14 days). Orders accompanied by Personal Checks that have been bank certified will be shipped with out delay. We have no objections to shipping on a COD basis if required, however, all COD's must be paid upon delivery with money order or certified check. When ordering by mail or fax by Visa or Master Card be sure to include your card number and expiration date. Residents of countries outside the United States must prepay for their goods in U.S. currency. All prices for goods shipped outside the continental United States are quoted FOB Sarasota, FL. All shipping/duty charges must be the responsibility of the consignee at rates applicable to that particular country.

### <u>Shipping</u>

Unless otherwise stated all orders will be shipped by United Parcel Service (UPS) surface system. Actuall UPS rates are charged based on package weight, zone (distance traveled from source) and insured value. We do **NOT** charge additional "handling" fees. We can also offer express (overnight, 2 day or 3 day) service if required, check with us for details and additional charges. Items too large or heavy for UPS service will be shipped common carrier (truck) freight collect. Optional shipping services include Surface Mail, Air Mail, and Air Freight at current rates.

### **Back Orders**

We dislike back orders as much as you do, and although we carry a huge inventory of merchandise it is inevitable that we will sometimes run out of certain items. In this case we will hold the order open and ship the back ordered item directly when the item becomes available. We **NEVER** charge for back order items until they actually ship. If an item looks like it will be on back order for longer than 4 weeks we will try and let you know the approximate time of delivery. You will then have the opportunity to reconfirm or cancel your order.

### Privacy & Security

Your personal information is used/maintained to facilitate the services you request and provide you with a smooth, efficient service. As a matter of policy, personal data is strictly used for internal purposes only. BAT treats personal data as an asset that must be protected against loss and unauthorized access. Our main computer network is **NOT** connected to any outside source and we employ many different security techniques to protect all data from unauthorized access.

### Special Orders

Some items that we offer are available as special orders. This includes custom variations on catalog items and race prepared parts. All special order items require a 50% deposit at the time the order is placed with the balance due at time of shipping. You will be advised at the time of your order if any item falls into this category.

### Returns

All returns must be authorized by BAT with in <u>30 days</u> of the invoice date and must be sent prepaid. Returns must have an authorized RGA number and be accompanied by a copy of the original invoice. A restocking charge of 20% may be assessed at our discretion depending on the reason for the return. Certain parts such as bearings, books, electrical items and piston rings or any part that has been modified or installed in any way are not returnable. Return items totaling less than \$20.00 can be returned for store credit only.

### Warranties

All parts are covered only by the manufacturers warranties and/or guarantees. BAT Inc. can assume no responsibility or liability for use or application by the user. Claims for goods damaged in transit are the responsibility of the carrier. You should always examine the contents of your package and notify the carrier immediately if there is any sign damage.

### - Important Notice -

Some of the equipment in this catalog is intended for racing or off-highway use in the United States. BAT Inc. ships all over the world so we must make it the responsibility of the customer to check the legality of fitting any part to his/her car. There are many different State, Federal and provincial regulations governing the replacement of automotive parts and BAT assumes no responsibility or liability for their illegal use. Please check the regulations in your area before ordering.