## FORD MOTOR CO. POWER RACK & PINION

**Capri, Mustang**
**Cougar, Granada**
**Escort, Lynx**
**Fairmont, Zephyr**
**Thunderbird, XR7**

### DESCRIPTION

Ford Motor Co. uses 2 types of power rack and pinion steering gears. Some Capri and Mustang models use a TRW built unit, and all other models use a Ford built unit. Operation of these units is the same, however, some of the maintenance procedures may be different, as noted in the text. Escort and Lynx models use a slightly different mounting set-up for the gear as shown in *Fig. 3*.

Integral power rack and pinion steering gear is a hydraulic-mechanical unit using an integral piston and rack design to provide power assisted steering control. Internal valving directs pump flow and controls pressure to reduce steering effort. Unit contains rotary fluid control valve integrated with input shaft and a boost cylinder integral with rack.

### LUBRICATION, TROUBLE SHOOTING & TESTING

*See Power Steering General Servicing in this section.*

### ADJUSTMENT

#### RACK YOKE BEARING PRELOAD

NOTE – *Steering gear must be removed from vehicle to perform following adjustment. On Ford built gears, do not remove external pressure lines unless there is leakage or damage. If they are removed, they must be replaced with new lines.*

**All Models (Except Escort and Lynx) – 1)** Clean exterior of gear thoroughly. On TRW gears, remove external pressure lines and drain fluid out openings. On all gears, attach suitable holding fixture and mount fixture in vise.

**2)** On Ford gears, drain fluid by rotating input shaft lock-to-lock 2 times with suitable tool (T74P-3504-R). Cover ports on valve housing.

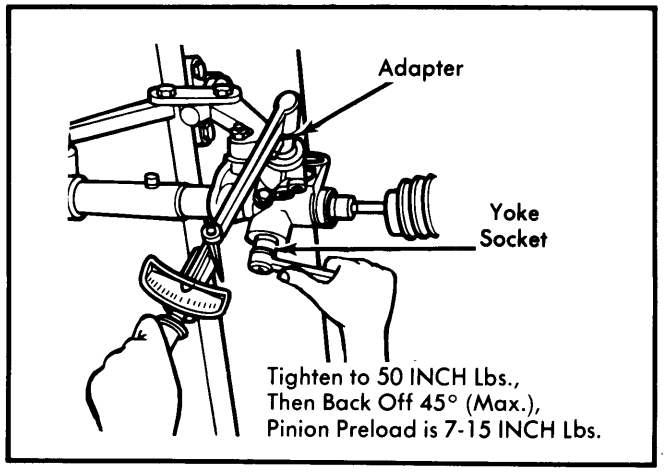


***Fig. 1 Rack Yoke Bearing Preload Adjustment (All Models Except Escort and Lynx)***

**3)** On all gears, insert an INCH lb. torque wrench with a 30-60 lb. capacity into the input shaft torque adapter tool (T74P-3504-R). Position adapter and wrench on input shaft splines.

**4)** Loosen yoke plug lock nut with suitable tool. On Ford gears, loosen yoke plug with a ¾" socket. On TRW gears, insert rack bushing tool (T77P-3504-A), and an INCH lb. torque wrench into slots in yoke plug.

**5)** Clean threads of yoke plug, and place rack at center of travel. Tighten yoke plug to 45-50 INCH lbs. Back off yoke plug approximately ⅛ turn, until torque required to initiate and sustain rotation of input shaft is 7-15 INCH lbs.

**6)** On Ford gears, place tool (T78P-3504-H) on yoke plug lock nut. While holding yoke plug, tighten lock nut to 44-66 ft. lbs. Recheck input shaft torque after tightening.

**7)** On TRW gears, place tool (T74P-3504-U) on lock nut. Hold yoke plug and tighten lock nut. Recheck input shaft torque after tightening. Reinstall external pressure lines.

**Escort and Lynx – 1)** Clean exterior of gear. Loosen and remove yoke plug lock nut. Back off yoke plug 1 turn. Using adapter tool (T81P-3504-U), and an INCH lb. torque wrench with a capacity of 100 INCH lbs., tighten yoke plug to 45 INCH lbs.

**2)** Mark gear housing in line with "O" mark on yoke plug adapter tool. Back off yoke plug so second mark on adapter tool aligns with mark on gear housing. Hold yoke plug and tighten lock nut to 40-50 ft. lbs.

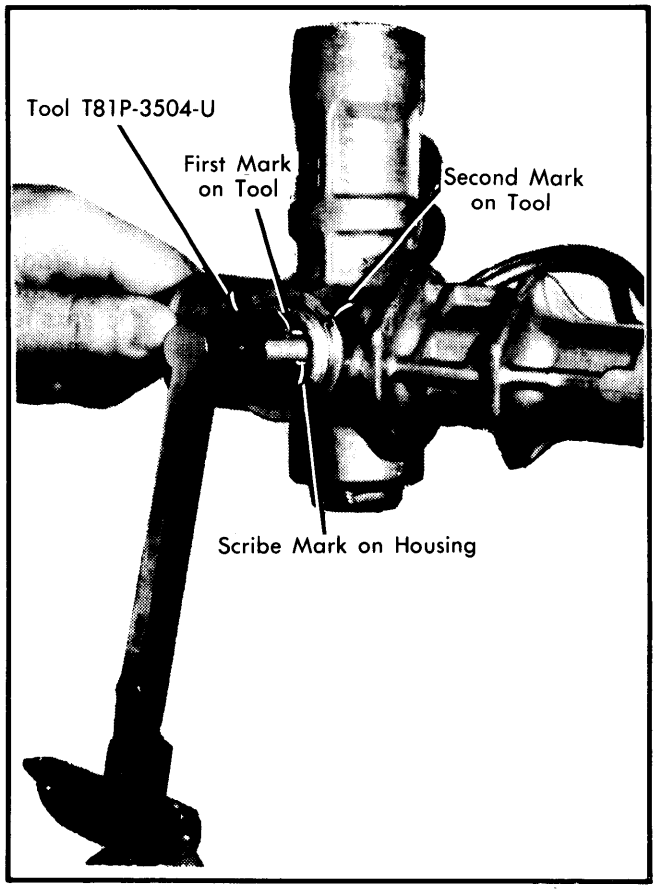


***Fig. 2 Escort and Lynx Yoke Bearing Adjustment***

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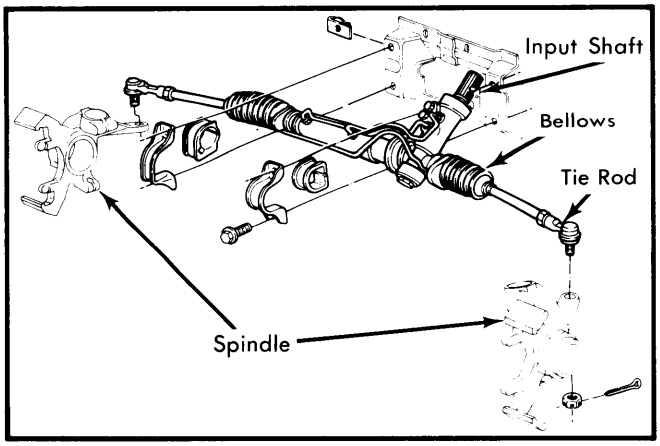


*Fig. 3 Escort and Lynx Steering Gear Assembly*

### REMOVAL & INSTALLATION

#### STEERING GEAR

**Removal (All Except Escort and Lynx)** – 1) Disconnect negative battery cable, then remove bolt retaining flexible coupling to input shaft. Unlock steering column, then raise and support vehicle. Remove both tie rod and retaining cotter pins and nuts, then separate studs from spindle using ball joint separator tool.

2) Support gear and remove bolts securing gear to crossmember. Lower gear slightly, then remove screw securing hose bracket to gear bracket. Disconnect pressure and return lines from gear housing and plug lines to prevent entry of dirt. Remove gear from vehicle.

**Installation (All Except Escort and Lynx)** – 1) Support steering gear assembly near crossmember, then install and tighten pressure and return line fittings. Hose swivel is normal, DO NOT overtighten. Install and tighten hose bracket to gear bracket screw.

2) On Ford gears, push rubber insulators inside gear housing before placing gear on crossmember. There should be no gap between insulator and face of gear boss. Insert input shaft into flex coupling, then position gear on crossmember. Install bolts, washers and nuts and tighten to specifications. Install tie rods to spindle arms, tighten and install cotter pins.

**3) Lower vehicle, then install bolt retaining flexible coupling to input shaft. Turn ignition key to "OFF" position, then connect negative battery terminal and remove coil wire. Fill power steering pump reservoir, then engage starter and cycle steering wheel to distribute fluid. Check fluid level and add as required. Reconnect coil wire, start engine and cycle steering wheel. Inspect seals and hoses for leaks at maximum pressure. Check and adjust wheel alignment as required. *For Wheel Alignment Specifications & Procedures, See WHEEL ALIGNMENT Section.***

**Removal (Escort and Lynx)** – 1) Disconnect negative battery cable. Unlock steering column. Remove access panel from dash, below steering column. Remove steering column boot retaining screws and slide boot up intermediate shaft.

2) Remove intermediate shaft bolts at input shaft and steering column shaft. Using wide blade screwdriver, spread slots enough to loosen intermediate shaft at both ends. Turn steering wheel to full left stop.

3) On all models (except those with manual transmission and no air conditioning) from top of vehicle, remove wire connector to pressure switch and remove pressure switch from pressure line with a 9/16" crow's foot wrench.

4) On models with air conditioning, lift air conditioning liquid line above dash panel opening and wire in place. Disconnect secondary air tube at check valve. Disconnect exhaust system at manifold. Support exhaust system to allow clearance for gear removal.

5) Remove exhaust hanger brackets. Separate pressure and return lines at intermediate connections. Drain fluid. Separate tie rods ends from knuckles using appropriate tool. Turn right road wheel to full left turn position.

6) Remove left tie rod end from tie rod on manual transmission models. On automatic transmission models, disconnect speedometer at transmission, and shift cable assembly at transmission. Remove screws holding heater water tube to shake brace below oil pan.

7) Remove nut from lower of 2 bolts holding engine mount support bracket to transmission housing. Tap bolt out as far as it will go. Remove gear mounting brackets and insulators. Drape cloth over apron opening edges to protect bellows during gear removal.

8) Separate gear from intermediate shaft by pushing up on shaft with a bar from underneath, while pulling gear down. Rotate gear forward and down to clear input shaft through dash panel opening.

9) With input shaft in full left turn position, move gear through right side apron opening until left tie rod clears left apron opening. Lower left side of gear and remove gear from vehicle.

NOTE – *Pressure and return hoses should remain on gear unless they are leaking, or gear housing is being replaced.*

**Installation (Escort and Lynx)** – 1) Rotate input shaft to full left turn stop. Position right road wheel to full left turn. Start right side of gear through right apron opening and move gear until left tie rod clears all parts.

2) Raise gear and insert left side through apron opening. Rotate gear so input shaft enters dash panel opening. With an assistant guiding intermediate shaft from inside car, insert input shaft into intermediate shaft coupling. Tighten clamp bolts finger tight.

3) Install gear mounting insulators and brackets. Make sure flat in left mounting area is parallel to dash panel. Tighten left mounting bracket to locate gear, then tighten right bracket.

4) If removed, install left tie rod end on tie rod. Attach tie rod ends to steering knuckles. Tighten nuts to minimum specified torque, then tighten until slot aligns with cotter pin hole and install cotter pin.

5) Install engine mount nut and tighten. Install heater water tube to shake brace. Connect transmission shift cable and speedometer cable on automatic transmission models. Connect pressure and return lines at intermediate connections.

6) Install exhaust hanger brackets and connect exhaust system. Connect secondary air tube at check valve. Remove wire from

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air conditioning line (if equipped). Check "O" ring on pressure switch and replace if cut. Install pressure switch and connect electrical connection.

**7)** Tighten coupling clamp bolt at gear input shaft first. Tighten other intermediate shaft clamp bolt. Install steering boot to dash panel. Install access panel. Turn ignition to "OFF", and connect negative battery cable. Fill system with fluid. Check and adjust toe if necessary. Tighten tie rod end jam nuts.

## OVERHAUL

### TIE ROD ENDS, BELLOWS, & TIE ROD BALL JOINT SOCKETS

**Disassembly – 1)** Mount gear in suitable holding fixture and place in vise. Remove outer tie rod ends and jam nuts. Remove 4 clamps retaining bellows to gear and discard clamps. Remove bellows and breather tube.

**2)** If pinion requires removal on Ford gears, remove at this time according to Input Shaft and Valve Assembly procedure. On TRW and Escort and Lynx gears, use a left-hand threaded screw extractor and remove spiral pin locking each tie rod socket to rack on both sides.

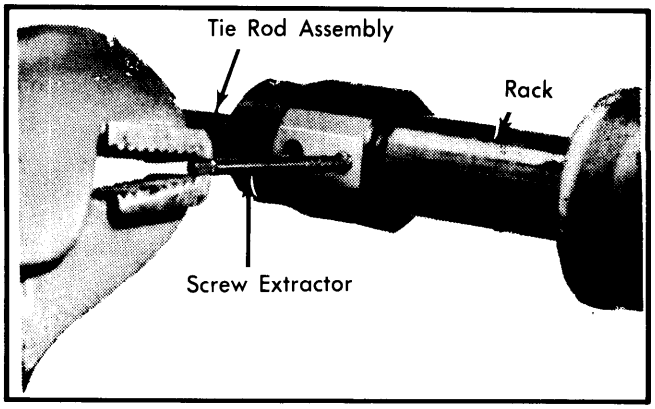


***Fig. 4 Removing Spiral Pin With Screw Extractor (Escort, Lynx and TRW Gears Only)***

**3)** On Ford gears, thread point of roll pin remover tool (T78P-3504-N) into roll pin in ball joint nut. Tighten tool finger tight. Pull pin by working slide hammer. Use caution as tool point is fragile. If pinion was not removed, place gear on bench to prevent gear teeth damage.

**4)** On Escort and Lynx, if pinion was not removed, turn gear against right turn stop. On all models, push out rack to expose several teeth. Hold rack with adjustable wrench and remove tie rod assemblies.

**Reassembly (TRW Gear)** – Install and tighten tie rod ball sockets on rack hand tight. Hold rack from rotating and tighten left socket. Install left spiral pin with pliers and small hammer. Flared head must be away from hole. Hold left socket while tightening right socket. Install right spiral pin. Install bellows, breather tube and new clamps. Install tie rod ends and lock nuts.

**Reassembly (Ford Gear Except Escort and Lynx) – 1)** If pinion is in housing, remove gear from holding fixture when installing tie rods. Install tie rods. Hold 1 ball joint nut with 1 5/16" box wrench while tightening other nut with tightening tool (T74P-3504-U). This tightens both nuts at same time.

**2)** Support ball housing with block of wood. Install new roll pins in ball housing by tapping lightly with plastic hammer. If pinion was removed, install pinion. Clean rack and housing. Apply gear lubricant to undercut in rods where bellows clamp to tie rod.

**3)** Install bellows and breather tube. Install new bellows clamps. Install jam nuts on tie rods. Apply outer end lubricant to tip rod threads. Install tie rod ends to tie rods.

**Reassembly (Escort and Lynx) – 1)** Install tie rod assemblies. If pinion was removed, hold 1 ball joint housing with 30 mm box wrench and torque other housing with tool (T81P-3504-G). This tightens both housings at same time. If pinion was not removed, turn gear against right stop and hold rack with adjustable wrench. Tighten ball joint housings separately with tool (T81P-3504-G).

**2)** Insert spiral pin in housing and tap in with small hammer. Install pinion, if removed. Apply gear lubricant to bellows undercut. Install bellows and breather tube. Install new bellows clamps and tighten. Install jam nuts and tie rod ends to tie-rods.

### INPUT SHAFT & VALVE ASSEMBLY

**Disassembly – 1)** Thoroughly clean exterior of housing and mount gear in suitable holding fixture. On TRW gears only, remove external pressure and return lines and small flare gaskets from ports. On all gears, loosen yoke plug lock nut and remove yoke plug.

**2)** Remove pinion bearing plug. Install torque tool on input shaft. Hold shaft and remove pinion bearing lock nut and discard lock nut.

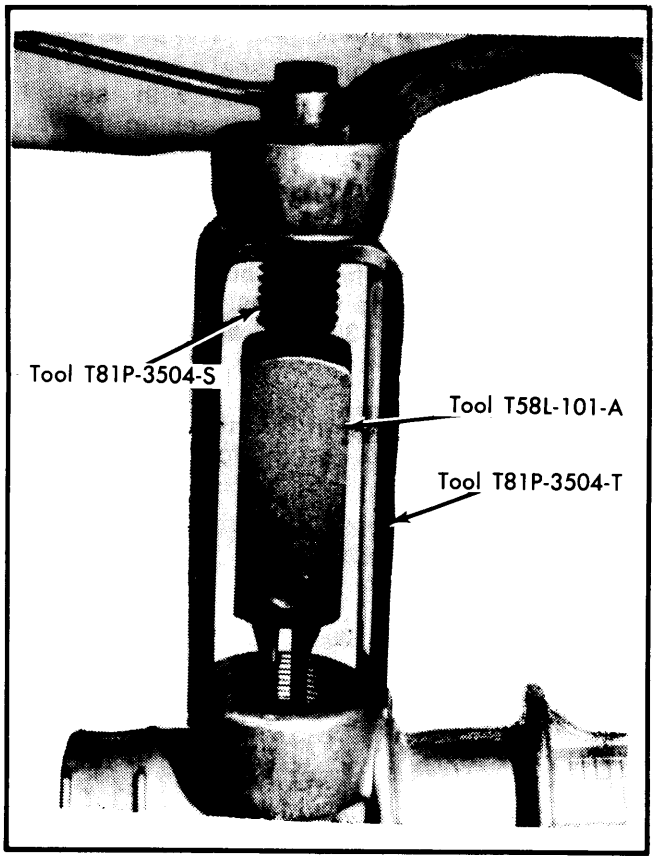


***Fig. 5 Removing Escort and Lynx Pinion Bearing***

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NOTE – *Do not allow rack to reach full travel when loosening or tightening lock nut.*

**3)** On TRW gears, remove bolts retaining valve housing-to-gear housing. Move rack to left stop with rack teeth exposed. Mark relative position of indexing flat on input shaft splines to valve housing face. Carefully remove valve housing and assembly out and away from gear housing.

**4)** On Ford gears, pry input shaft dust seal out of valve housing, using care not to damage housing surfaces. Remove snap ring from housing. Attach input shaft puller tool (T81P-3504-T for Escort and Lynx, T78P-3504-B all others) to input shaft. Turn nut to remove valve. Shaft seal and bearing will come out with valve body.

**5)** On TRW gears, hold valve assembly by housing and carefully tap input shaft with plastic hammer to remove input shaft assembly. Discard pinion seal. Use slide hammer (T50T-100-A) and attachment tool (T58L-101-A) to remove pinion bearing. Remove "O" rings from input shaft assembly taking care not to damage grooves.

**6)** Using slide hammer and attachment tool, remove input shaft support bearing. Remove input shaft oil seal from bore with fingers. Pry dust seal from bore with chisel, taking care not to damage valve housing surfaces.

**7)** On Ford gears, insert sleeve tool (T81P-3504-E and T78P-3504-E1 for Escort and Lynx, and T78P-3504-E all others), into gear housing until it bottoms. Activate expander by turning small nut while holding large nut until fully expanded. Remove tool and seal with slide hammer (T50T-100-A).

**8)** Remove pinion bearing from gear housing with slide hammer tool (T50T-100A) and attachment (T58L-101-A) on all except Escort and Lynx. On Escort and Lynx, remove bearing with tool (T81P-3504-S), attachment (T58L-101-A) and horseshoe attachment (T81P-3504-T). Remove input shaft seal rings by cutting off with pocket knife, using care not to damage valve sleeve.

**Reassembly – 1)** On TRW gear, install input shaft seal with lip facing inside of housing. Use finger to press seal against bottom of bore to avoid contact with support bearing. On Ford gears, seat pinion bearing against shoulder in gear housing using suitable tool (T78P-3504-G all except Escort and Lynx, T81P-3504-H for Escort and Lynx). Lubricate pinion seal and install with lip toward tool (T78P-3504-F all except Escort and Lynx, T81P-3504-F for Escort and Lynx), seating it against shoulder.

**2)** Fill input shaft dust seal bore on TRW valve housing with D0AZ-19584-A type lubricant and install seal with plastic ring replacer tool (T74P-3504-N). Lubricate input shaft support bearing with power steering fluid and install into valve housing with suitable driver (T74P-3504-P).

NOTE – *Tool will control installation depth to prevent contact with seal.*

**3)** Install 4 plastic "O" rings in grooves on valve assembly. Using plastic ring replacer tool (T74P-3504-G) or equivalent, start "O" ring onto valve. With "O" ring installer, carefully work "O" rings into grooves. The last "O" ring will snap into outboard groove directly off "O" ring installer. Lubricate thrust washer with power steering fluid, and install input shaft.

NOTE – *On Ford gears, use tool kit (T75L-3517-A for all except Escort and Lynx, T81P-3504-M for Escort and Lynx) to size and install "O" rings and valve assembly, assuring that rings turn freely in grooves and are not bent over lands.*

**4)** On TRW gears, lubricate assembly with power steering fluid, then insert assembly, splined end first, into suitable installing tool (T74P-3504-H). Position assembly over valve bore of housing, then push unit through until it bottoms and full spline passes through dust seal. Remove tools.

**5)** On Ford gears, position rack in housing so right end protrudes ¼" more than left end on all except Escort and Lynx. On Escort and Lynx, place rack so 3 teeth protrude from left end of housing, then move slightly to center the visible tooth in valve bore.

**6)** On TRW gears, install pinion seal on shaft (cup shape toward housing) and install pinion bearing in housing through plug bore. Lubricate valve assembly and insert in housing in same position as removed (flat of spline aligned with file mark). Install and finger tighten valve housing bolts, then tighten 1 turn at a time to specified torque.

**7)** On Ford gears, insert valve sizing tool (T78P-3504-C all except Escort and Lynx, T81P-3504-M1 Escort and Lynx) into valve housing. On Escort and Lynx, position D flat on input shaft to right and vertically and insert valve assembly into bore. On all other models, line up D flat 180° from yoke plug hole center and insert valve assembly into bore.

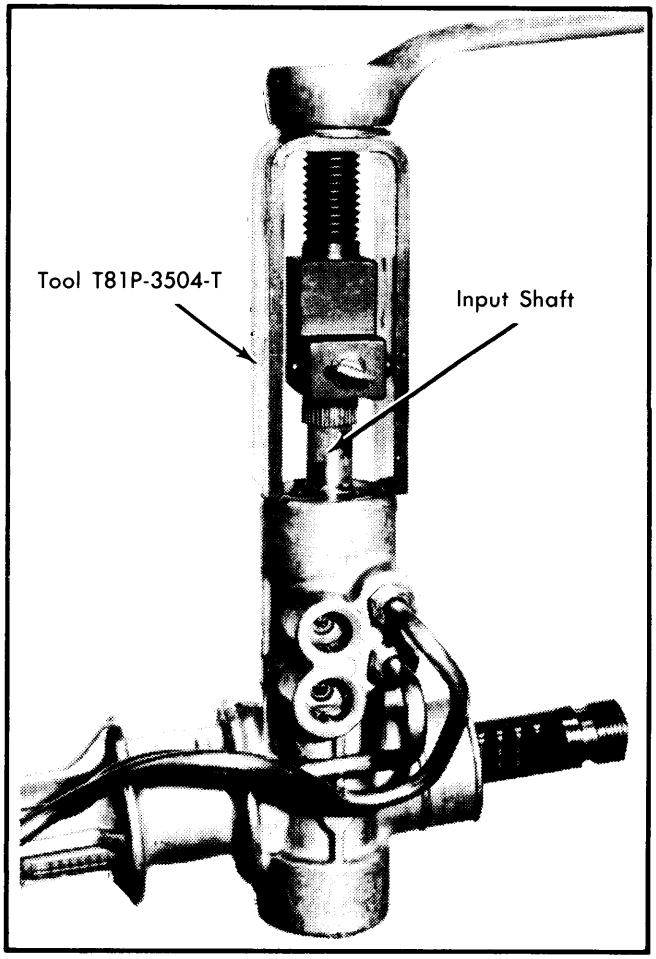


***Fig. 6 Removing Escort and Lynx Valve Assembly***

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NOTE – D flat must point straight down (3 o'clock position Escort and Lynx) with gear in vehicle and placed in straight ahead position. Rotate input shaft if necessary to mesh pinion to rack teeth.

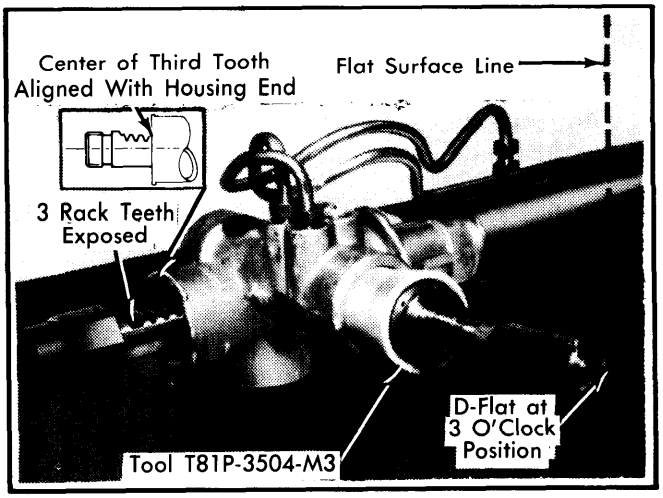


*Fig. 7 Installing Escort and Lynx Valve Assembly*

**8)** On TRW gears, install pinion torque adapter (T74P-3504-R) on input shaft splines. Install lock nut on pinion shaft. While holding shaft, tighten lock nut. Install pinion bearing plug. Install new flare gaskets in line fittings. Install pressure lines and tighten. Install yoke plug lock nut and set rack yoke bearing preload.

**9)** On Escort and Lynx, install input shaft bearing with wide face of case outward in valve bore. Seat bearing. On all Ford gears, install lock nut on pinion end of valve assembly. Hold input shaft and tighten lock nut. The rack must be away from stops at this time. On all except Escort and Lynx, install bearing in valve bore.

**10)** Apply gear lubricant to input shaft seal and install seal with lip toward valve. Seal seal. Install retaining snap ring in valve bore. Coat dust seal with suitable lubricant and install in bore on all except Escort and Lynx. Install steering gear housing cap and tighten to specifications.

**11)** Fill yoke housing with 2 ounces gear lubricant. Install plastic yoke so it seats against rack with finger pressure. Install yoke thrust spring. Install yoke plug and set bearing preload. Install lock nut and tighten. If pressure lines were removed, replace with new lines, removing copper seals from bore prior to installation.

### GEAR HOUSING & RACK ASSEMBLY

**Disassembly – 1)** Remove tie rod and socket assemblies, lock nuts from both ends of rack, and input shaft and valve assembly. Remove yoke plug lock nut and yoke plug. Remove yoke spring and yoke bearing from gear housing. On Ford gears except Escort and Lynx, push rack in on right side far enough to remove snap ring from housing. On TRW and Escort and Lynx, push rack in on right side until it bottoms. Insert locking tool (T77P-3504-A) so 2 drive tabs engage slots in end plate or lock ring. On TRW, rotate tool counterclockwise to drive lock wire out of slot and remove lock ring. On Escort and Lynx, rotate tool clockwise until end of lock wire is visible in slot. Turn end plate counterclockwise while using an ice pick to start lock wire out of slot.

**2)** Slowly pull rack from right side of housing, until rack piston contacts rack bushing. Apply pulling effort (do not hammer) on rack until bushing is removed from housing, then remove rack. Remove internal high pressure rack oil seal using suitable remover tool (T74P-3504-C). Remove plastic and rubber "O" rings from rack piston. Remove rack bushing oil seal by placing bushing and suitable tool (T74P-3504-E) in vise. Remove oil seal with suitable remover tool and slide hammer. Remove rubber "O" ring from bushing.

NOTE – *On Escort and Lynx models, use tools T81P-3504-B and D to remove seals. Use tools T78P-3504-J and L to remove seals on all other models.*

**Reassembly (All Except Escort and Lynx) – 1)** Place high pressure oil seal on suitable installer tool (T74P-3504-D for TRW gears, T78P-3504-K for Ford gears) with lip facing tool. Mark center tooth space on rack where it will be visible through valve bore to facilitate valve replacement. With gear housing in vertical position, insert installer into right side bore of housing and tap into place. Do not cock handle of tool. If tool binds in area of left turn pressure port, align flat on tool with pressure port. Install rubber "O" ring in groove of rack piston, then place plastic "O" ring over rubber "O" ring using suitable installer tool (T74P-3504-G).

**2)** Place long protective sleeve (T74P-3504-K) over rack gear teeth to protect internal oil seal. Thread short protective sleeve (T74P-3504-J) over threads on right side of rack. Lubricate plastic "O" ring and protective sleeve with power steering fluid. Install larger end of sizing tool (T74P-3504-H) onto rack tooth end of rack (TRW) or smaller end of tool (78P-3505-M) into right side of gear housing (Ford built gear).

**3)** Push rack into housing until leading end engages internal oil seal. Position sizing tool so it compresses plastic oil seal and guides it into housing bore. Push rack in until protective sleeve protrudes from left side of housing. Remove sizing tool and protective sleeve from end of rack. Place a ball housing lock nut on left end of rack to prevent rack teeth from damaging internal oil seal (TRW). On Ford gears, install tie rod on left end to prevent damaging oil seal.

**4) Install rubber "O" ring on aluminum rack bushing, then install high pressure oil seal in rack bushing so that lip spring faces inside of bushing using suitable installer tool (T74P-3504-F). Lubricate short protective sleeve on rack end and "O" ring seal on bushing with power steering fluid. Start bushing, seal facing out, on rack. Pass bushing and seal over protective sleeve and into housing bore until lock nut threads are visible, then remove protective sleeve. Pass rack bushing lock nut over rack and start it into threads in housing bore.**

NOTE – *On Ford built gear, place end plate against rack bushing and apply hand pressure to tool (T78P-3504-M) until bushing seats in housing. If rack bushing will not seat with hand pressure, use a suitable deep socket and mallet to tap bushing into place. Install snap ring and remove protective sleeve. Fill yoke plug with 2 ozs. of gear lube.*

**5)** On TRW gears, insert lock ring tool (T77P-3504-A) over end of rack and engage slots in lock ring. Rotate lock ring until wire hole is positioned at housing slot, then engage retaining wire. Rotate lock ring until wire is fully engaged and wire end is 180° opposite slot. On all gears, install tie rod assemblies and tighten. On Ford gears, install roll pins in ball joint nuts. Seat pins by tapping lightly with hammer.

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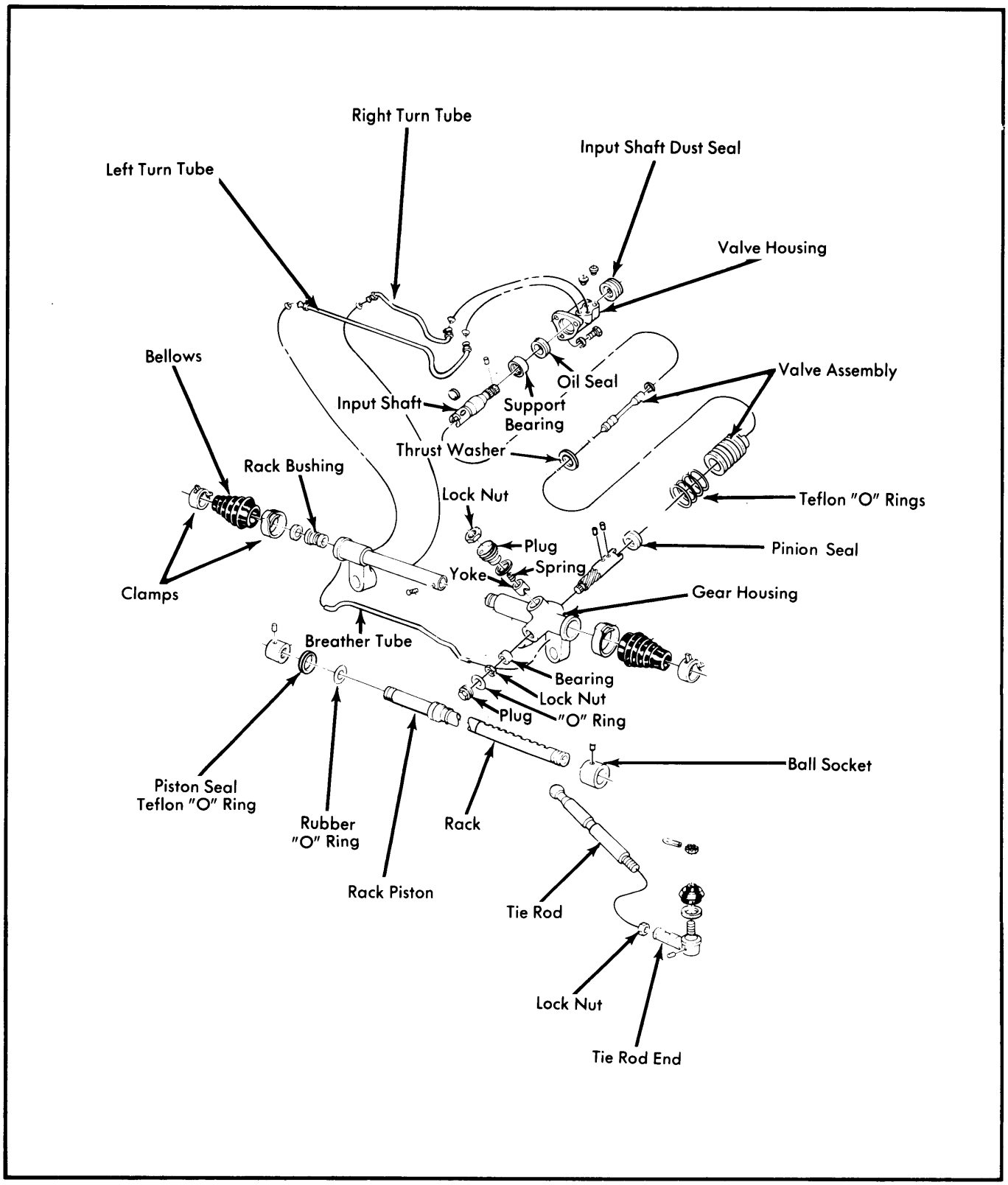


*Fig. 8 Exploded View of TRW Power Rack & Pinion Steering Gear (Ford Gear Similar)*

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**6)** Install input shaft and valve assembly into housing. Insert yoke bearing, spring, plug and lock nut. Adjust yoke bearing preload. On Ford gears, lubricate tie rod undercuts where bellows clamp on. Install bellows and equalizer tube. Install bellows clamp. Install jam nuts and tie rods ends on tie rods.

**Reassembly (Escort and Lynx) – 1)** Lubricate inner rack seal and place on replacer tool (T81P-3504-C) with lip and spring facing tool. Install sizing tool (T81P-3504-K) in rack tube. Insert replacer into right side bore and push in by hand until it bottoms. Tap on tool handle to seat seal. Do not cock tool handle.

**2)** Install piston seal tool (T81P-3504-L) over rack end. Slide rubber "O" ring over tool onto piston groove. Slide plastic "O" ring over tool onto piston groove over rubber "O" ring. Pack rack teeth with C3AZ-19578-A grease. Apply grease to yoke bearing area. Place protective tool (T81P-3504-J) over rack teeth. Lubricate piston seal ring and sleeve with power steering fluid. Insert sizing tool (T81P-3504-K) into right side gear housing opening.

**3)** Place rack, with protective sleeve, into sizing tool. Push rack into housing until sleeve engages oil seal. Position sizing tool so it compresses plastic seal ring and guides it into housing bore. Push rack in until protective sleeve protrudes from end of rack. Remove tools. Install left tie rod assembly hand tight.

**4)** Apply gear lubricant to outer rack oil seal. Install oil seal in rack bushing. Lip spring must face inside of bushing. Install nylon ring in seal. Install rubber "O" ring on rack bushing. Install protective sleeve (T81P-3504-N) over threads on right end of rack. Lubricate sleeve and "O" ring on rack bushing with automatic transmission fluid. Start bushing, seal and nylon ring on rack.

**5)** Pass bushing and seal over sleeve and into housing bore. Place end plate against rack bushing with drive slots facing out. Remove sleeve. Using lock ring tool (T77P-3504-A), push end plate until groove is visible in retainer wire slot on rack tube. Rotate end plate until retainer wire hole is visible in cylinder slot. Engage bent end of wire in hole.

**6)** Rotate end plate clockwise until retainer wire is engaged. Rotate ½ turn more so wire hole is 180° from wire slot. Install right tie rod assembly and tighten tie rod ball joint nuts. Insert spiral pins in tie rod housings. Install input shaft, valve assembly and rack yoke. If removed, install external pressure lines and tighten tube nuts. Install bellows, equalizer tube, clamps jam nuts and tie rod ends.

### TIGHTENING SPECIFICATIONS

| Application | Ft. Lbs. |
|---|---|
| Pressure and Return Line Fittings | |
| Ford Gears (Except Escort and Lynx) | 15-20 |
| All Other Gears | 10-15 |
| Pressure and Return Lines | |
| Ford Gears (Except Escort and Lynx) | 15-20 |
| All Other Gears | 10-15 |
| Gear-to-Crossmember Mounting | |
| All (Except Escort and Lynx) | 80-100 |
| Tie Rod End-to-Spindle Arm Nut | |
| All (Except Escort and Lynx) | ①35-47 |
| Escort and Lynx | ①29-35 |
| Tie Rod End-to-Tie Rod Jam Nut | |
| All (Except Escort and Lynx) | 35-50 |
| Steering Flex Coupling Bolt | |
| All (Except Escort and Lynx) | 20-30 |
| Yoke Plug Lock Nut | |
| All (Except Escort and Lynx) | 44-66 |
| Escort and Lynx | 40-50 |
| Yoke Plug | |
| All Models | 45 INCH Lbs. |
| Pressure Line Fitting at Valve and Housing | |
| Ford Gear (Except Escort and Lynx) | 22-28 |
| All Other Gears | 10-15 |
| Valve Housing-to-Gear Bolts (TRW) | 10-15 |
| Pinion Bearing Lock Nut | |
| TRW Gear | 23-34 |
| Ford Gear (Except Escort and Lynx) | 30-40 |
| Ford Gear (Escort and Lynx) | 20-35 |
| Pinion Bearing Plug | |
| All Gears (Except Escort and Lynx) | 40-60 |
| Excort and Lynx | 35-55 |
| Rack Bushing Lock Nut | 80-120 |
| Tie Rod Ball Socket-to-Rack | |
| All Gears (Except Escort and Lynx) | 55-65 |
| Escort and Lynx | 50-55 |

① – Tighten to nearest cotter pin slot after tightening to specification.

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