



TECHNICAL SERVICE BULLETIN

Passenger and Light/Medium Commercial

Bulletin Number **04R/06**
Issue Date: 11 May, 2006

Circulate to	Service Manager	Parts Manager	Foreman	Receptionist	Technicians		
	X	X	X				

NOTE: TSB 04R/06 SUPERCEDES TSB 78/04 – PLEASE DESTROY ALL COPIES OF TSB 78/04. THIS BULLETIN HAS BEEN RE-RELEASED TO INCORPORATE BF FALCON VARIANTS.

Subject/Concern: POWER STEERING GEARS KNOCKS, CLUNKS, CREAK, CLICKING ETC...

Models: All BA & BF Vehicles

Summary

Cause: Knocking / Noisy Steering Gears. (Knocks, Clunks, Graunch, Clicking, etc...).

Action: Follow this TSB to correct the above concern without the need to replace the steering gear.

Warranty Status: Reimbursable within the provisions of the Warranty and Policy Manual.

Parts Required

Description	Part Number	Quantity
90° Countersink 3 Flute Cutting Tool (AE Baker / Blackwood's Part No. 01175132)	Dealer Supply	1
0.20mm Stainless Steel Washer	BA3S639A	1 Off

Service Procedure

RE-ISSUE – PLEASE DESTROY ALL PREVIOUS COPIES OF TSB 04/06

This TSB has been re-released as there has been a change to the warranty claim details.

Concern Description:

Approximately 80% of steering gears (racks) replaced under warranty for the above concerns have been analyzed, tested and found to be No Fault Found (NFF).

The following procedure will assist Technicians to determine whether the steering gear (rack) is faulty.

Prior to replacement or repairs of the power steering gear, the following diagnosis information and/or repair procedure should be followed to determine if the power steering gear is faulty.

Service Action:

KNOCKING / NOISY STEERING GEARS, (KNOCKS, CREAK, CLUNKS, GRAUNCH, CLICKING, TICKING etc...).

Testing and analysis has shown that the main cause for the above knock type noises is dependant on the interface between the steering gear and the cross member. There are actually 2 causes and they are:

1. Steering gear surface damage.
2. Thread burr on the stud hole in the cross member.

The following Steps 1 & 2 are to ensure that all relevant hardware are torqued to the correct spec, to rule out any other hardware type issues and/or wheel bearing concern that can be easily misdiagnosed as steering gear related issue.

Check Wheel Bearing condition.

Check front strut movement / suspension torque / sub frame / cross member mounting bolts.

- Wheel Bearing Check => Page 100-04-56
- Front Suspension Torque Specifications => Page 204-01-2
- Steering Torque Specifications => Page 211-02-2

Please Note: The above checking method provides the highest load onto the steering gear, in particular to the interface of the steering gear to the cross member that maybe creating the above concern.

If no noise is present / heard. Road Test Vehicle to confirm no noise. If Noise is still present then go to **step 6**.

If no noise is present / heard after road test. Then return vehicle back to customer.

If a creak, clicking, ticking, knock type noise is still present then you will need to remove the steering gear.

Step 7

Please Note: The 2.0mm x 45° chamfer provides sufficient clearance for the burr that is caused by the stud fitment. If chamfer exists on the steering gear then please go to step 8.

NOTE : CHAMFER ALREADY EXISTS ON VEHICLES ASSEMBLED FROM 1st OF SEPTEMBER 2003.

Step 8

Using a smooth Flat file, lightly file the front mounting face of the steering gear. (Ref to Fig 2). This is to ensure that the mounting face on the steering gear is free from any burrs and/or other marks.

Step 9

Clean mating face on 2B Cross Member. Ensuring it is free from any oil, dirt and other contaminants. (Ref to Fig 3).

Step 10

Fit Stainless Steel Washer on Drivers Side Mounting Stud. (Ref to Fig 5).

NOTE : STAINLESS STEEL WASHER ALREADY FITTED TO VEHICLES ASSEMBLED FROM 30th OF JUNE 2004.

Step 11

Re-Fit steering gear. Ensuring that the steering gear mounting bolt nut (Ref to Fig 4) is torqued to 80Nm.

Note: To R & R Steering Gear for vehicles fitted with a V8, please refer to the BA workshop manual section 211-02 page number 211-02-24. You may also find that on an XR fitted with a V8 Engine the left hand side exhaust flange stud may have to be removed.

Step 12

With vehicle stationary and **not** running re-check for any noises by rotating the steering wheel from side to side with the wheels pointed straight ahead.

Step 13

If a creak, clicking, ticking, knock type noise is still present then replace the steering gear.

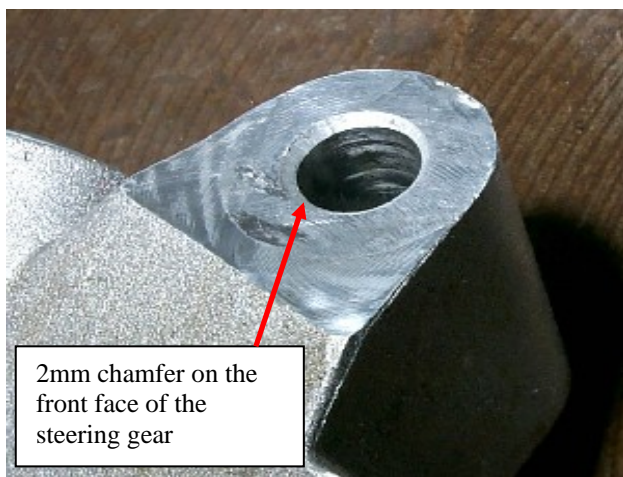


Figure 1:



Figure 2:



Figure 3:

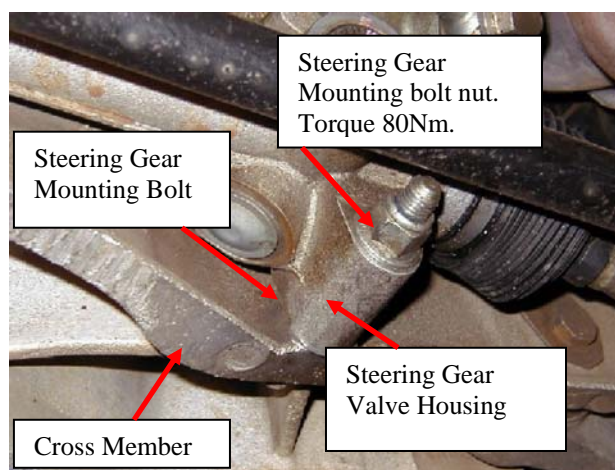


Figure 4:

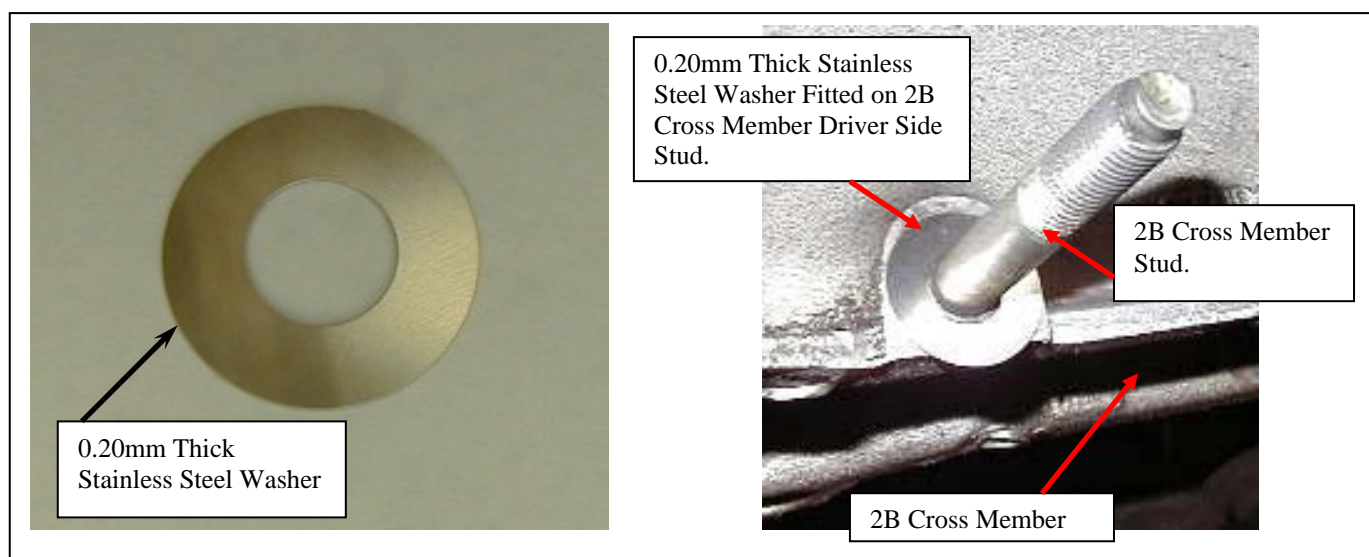


Figure 5

Note: Claims will be scrutinized by WARPEC. No Fault Found (NFF) Claims and/or claims whereby a wheel alignment has been carried out and no before and after test results (In the claim comments area) have been submitted with the claim will be denied.

Operation Number/Standard Repair Time

Operation Description	Operation Number	Time
R & R Steering Gear (Manual Gearbox 6 & V8 Cylinder Engine)	TSB 07804	1.00
R & R Steering Gear (Automatic Gearbox 6 & V8 Cylinder Engine)	TSB 07804	1.00
Front Toe-in correct (NOTE: Before and after results must be entered with claim).	3001A6F	0.20
2.0mm x 45° Chamfer on Steering Gear Housing, Clean, and carry out Hardware and Associated Parts Checks.	TSB 07804	0.40
Road Test (Max. Claimable Allowance)	1000A	0.30

Repair/Claim Coding

Warranty Claim	Causal Part	Condition
Enter 00406 in box "X" of warranty claim to reference this TSB		
Fairmont Ghia, V8 Engines, Fairlane, Fairlane Ghia, and 17" Alloys.	BA3504B	57 Knocks
All others.	BA3504A	57 Knocks

WARPEC

Ford Customer Service Division