MG MOTOR UK LIMITED

RECALL ACTION BULLETIN

Date: 18-03-2011

Number: RC 002

Model: MG TF

Issue No: 1

Range: All MG TF Vehicles 2008 - on

MG TF front lower suspension ball joint rivet check / replace

Description:

Isolated instance of lower suspension ball joint rivet failing to meet durability requirements

Action:

Check front lower suspension ball joint rivet.

Drill out and replace front lower suspension ball joint rivet with nuts and bolts provided if necessary.

Detail:

Paint Spot Check

1. Open the bonnet, check for Yellow paint spot on the R/H (off side) inner wheel arch adjacent to the horns and above the E mark label as shown below. If the paint mark is present **NO FURTHER ACTION IS REQUIRED**. If the paint mark is not present please follow the content of this Recall Action Bulletin.

Front lower suspension ball joint rivet check

2. Raise vehicle on suitable lift.

WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

3. Visually check front lower arm rivets that secure the ball joint to the lower arm (Please see photos below)

Fig.1 - Shows lower front arm with mild steel black painted rivets with flat head finish. Also note the black painted ball joint

Fig 2. – Shows lower front arm with stainless steel rivets with domed head finish. Also note unpainted ball joint

Fig. 1

Fig. 2

One additional visual difference as shown in Fig 3 is that the lower arm fitted with mild steel rivets has a seam welded joint (a) where as the lower arm fitted with stainless steel rivets has a sandwich construction (b).

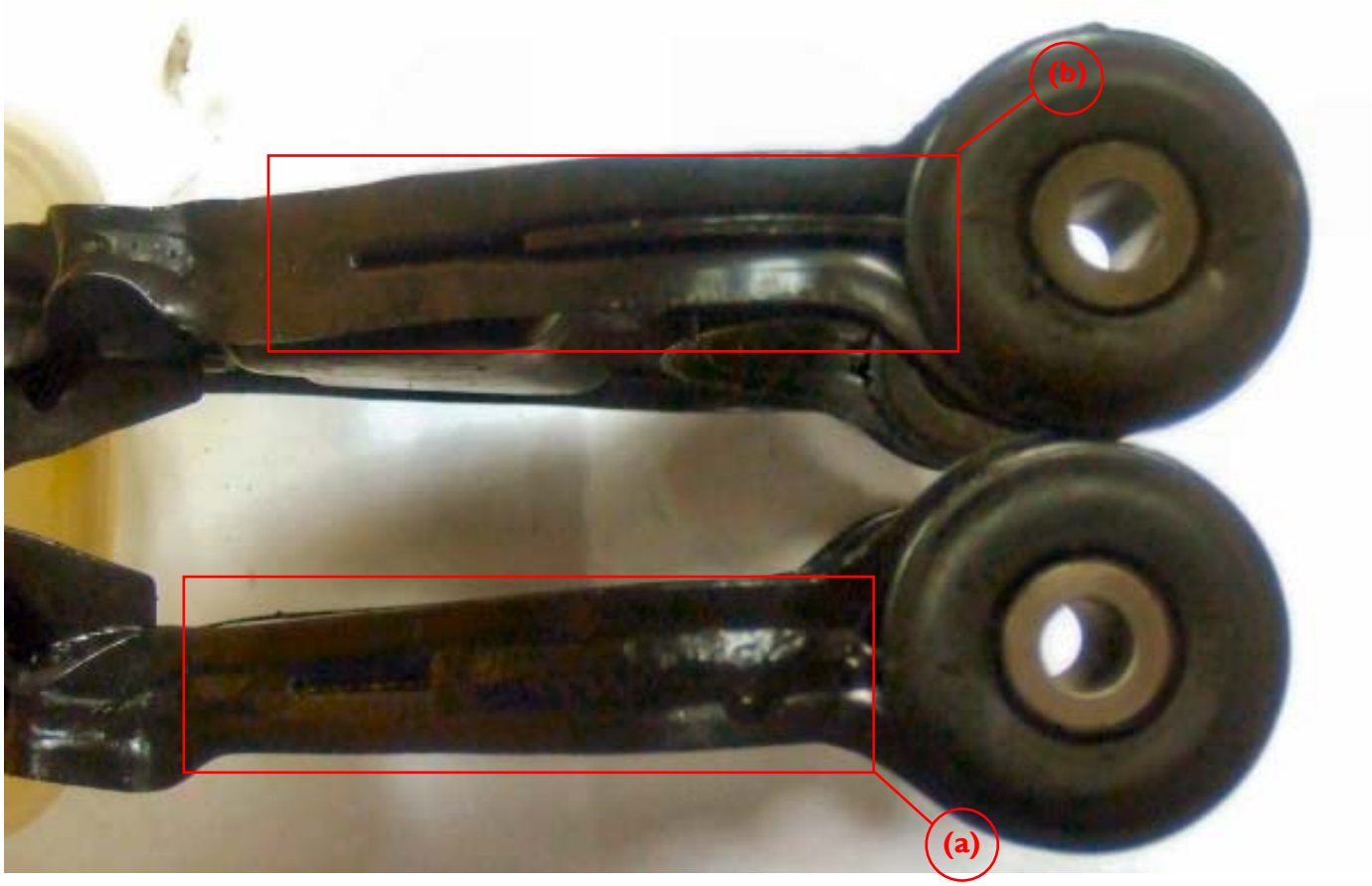


Fig. 3

* Please Note one side front lower arm rivets on a vehicle may be stainless steel and one side may be mild steel

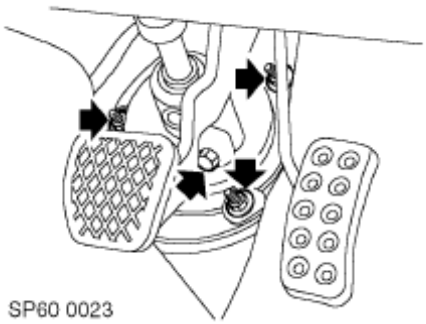
4. IF both front lower arms rivets are stainless steel add Yellow a paint spot to the R/H (off side) inner wheel arch adjacent to the horns and above the E mark label as shown below.

5. If one or both front lower arm rivets are identified as being of mild steel construction please carry out the below action:

FRONT SUSPENSION LOWER BALL JOINT REPLACEMENT

SUSPENSION ARM - LOWER FRONT

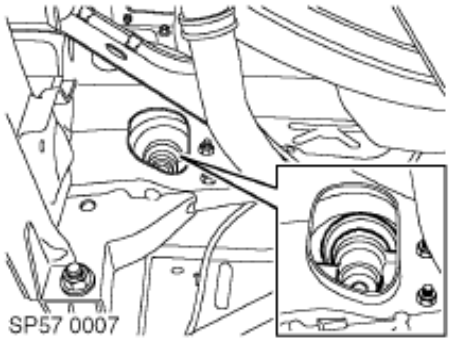
Remove



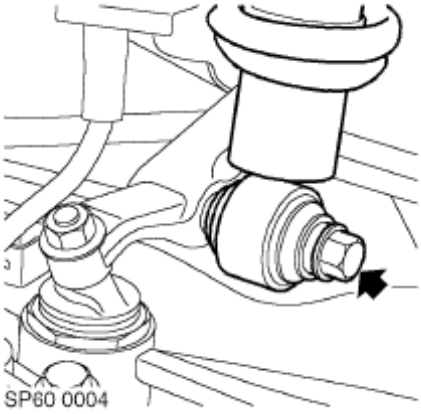
1. Remove bolt securing steering column universal joint to rack pinion.
2. Release steering column universal joint from rack pinion.
3. Remove 3 nuts securing steering rack pinion cover to body.
4. Raise front of vehicle and support on stand(s).

WARNING: Do not work on or under a vehicle supported only by a jack. Always support the vehicle on safety stands.

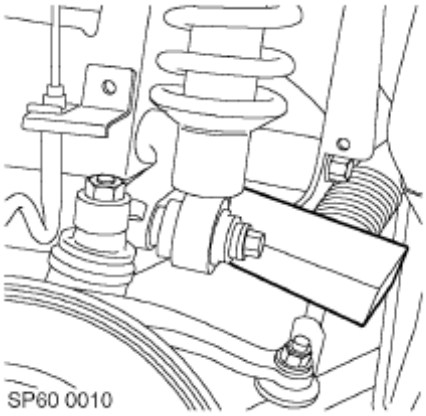
5. Remove road wheel(s).



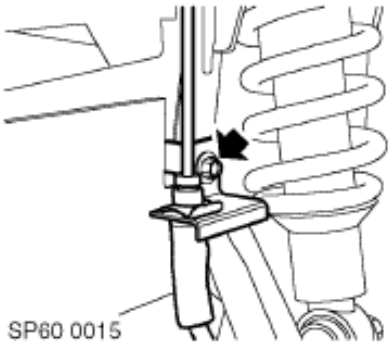
6. Release pinion cover from steering rack pinion housing and retaining studs.



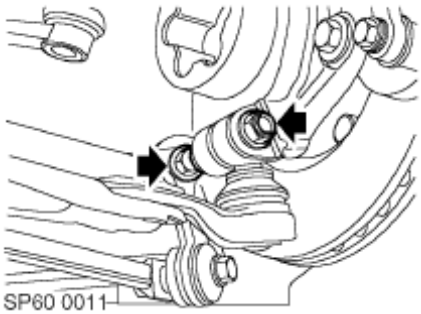
7. Remove bolts securing damper assemblies to upper suspension arms, move dampers aside.



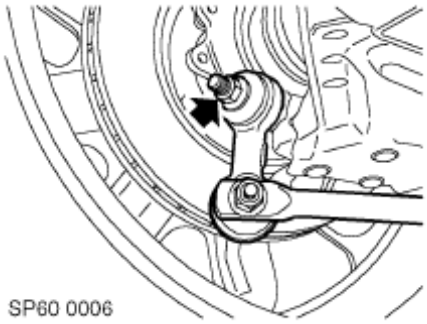
8. Raise suspension and fit a suitable block between upper arm and subframe.



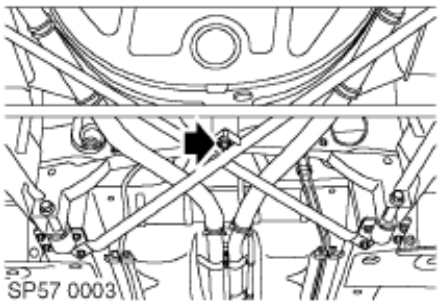
9. Remove 2 bolts securing LH and RH brake pipe support brackets to subframe turret.



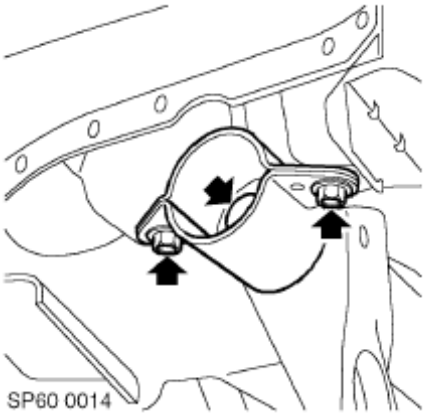
10. Remove nut and bolt securing lower arm ball-joint to hub.
11. Release ball-joint from lower arm.



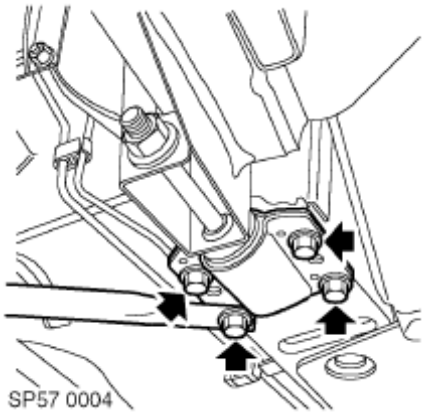
12. Remove nut and bolt securing anti-roll bar link to lower arm.



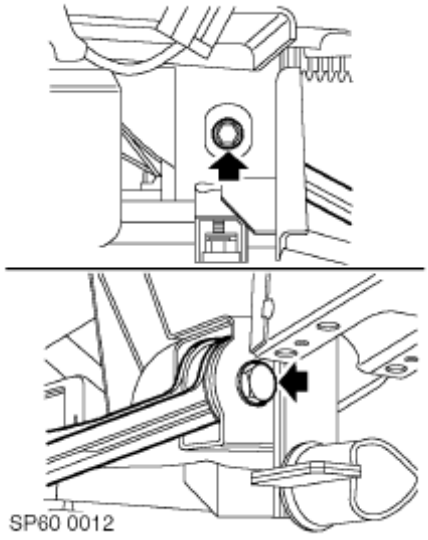
13. Remove bolt securing cross brace to centre mounting.
14. Support rear of front subframe on a jack.



15. Loosen 2 bolts and 2 nuts and bolts securing front subframe mountings to body.



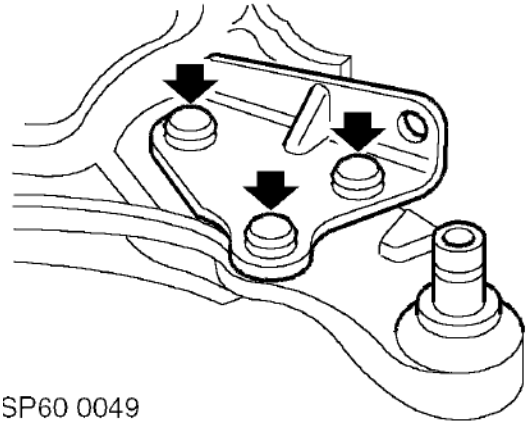
16. Remove 8 bolts securing front subframe rear mountings to body.
17. Remove lower arm bolt access grommet from subframe.
18. Lower subframe on jack to gain access to lower suspension arm rear retaining bolts.



19. Remove front bolt securing lower arm to subframe.
20. Remove rear bolt securing lower arm to subframe.
21. Remove lower arm.

BALL JOINT - LOWER

Remove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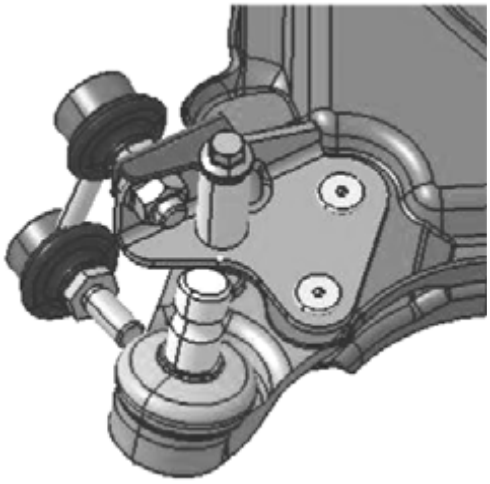
1. NOTE: 85th Anniversary Edition features 2 rivets only. Removal of the nut and bolt securing the anti roll bar connection strengthening plate will be necessary.

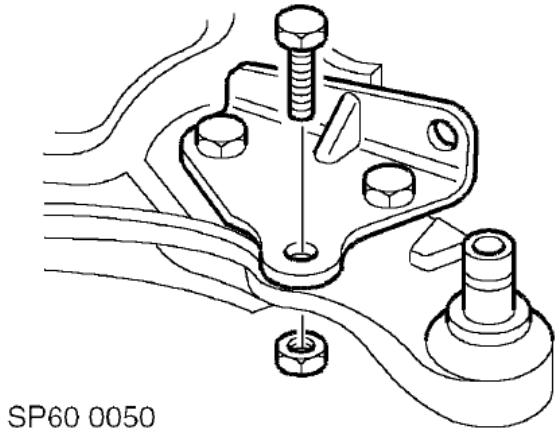


2. Drill pilot hole in rivet heads from the upper side using centre dimple in the rivet heads as a guide (4mm Drill). NOTE: Use pedestal drill for accuracy.

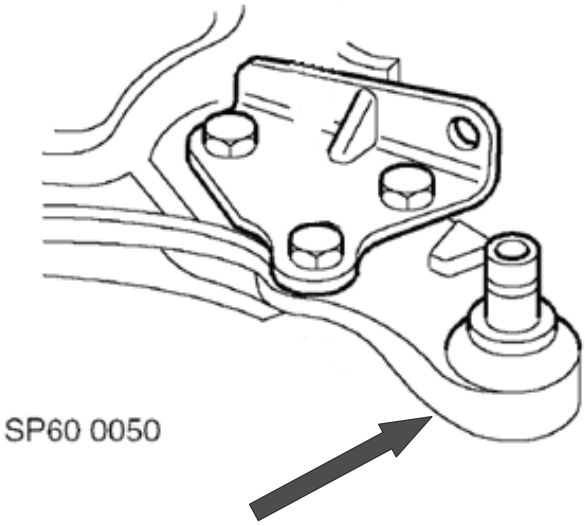
3. Enlarge pilot hole to 8mm (Rivet Diameter) to remove rivet heads. If the rivet head does not detach, enlarge drill size in half mm increments until it does detach. Taking care not to drill into arem material. *CAUTION: Do not enlarge holes in lower arm.*
4. Press out rivet studs.
5. Remove ball joint assembly.

Refit

1. Clean ball joint and lower arm mating faces.



2. Fit ball joint to lower arm.



3. Once nuts & bolts have been loosely fitted into the arm, load the ball joint in the direction of the arrow, so any 'play' between the bolts and hole is removed before tightening bolts to 32Nm. NOTE: 85th Anniversary Edition features 2 rivets only and therefore only 2 new nuts and blots are necessary. Removal of the nut and bolt securing the anti roll bar connection strengthening plate will be necessary. NOTE: Ensure bolt heads are fitted from above the lower arm.

SUSPENSION ARM - LOWER FRONT

Refit

4. Clean lower arm bushes, bush recesses and pivot bolts.
5. Fit lower arm to subframe.
6. Fit bolts securing lower arm to subframe, do not tighten at this stage.

7. Raise subframe on jack.
8. Align subframe mountings and cross brace to body. Fit and tighten bolts securing subframe mountings and cross brace to 45 Nm.
9. Tighten nuts and bolts securing front subframe mountings to body to 30 Nm.
10. Fit and tighten bolt securing cross brace to centre mounting to 45 Nm.
11. Clean lower ball joint and seat.
12. Position hub to lower ball joint, fit and tighten nut and bolt to 45 Nm.
13. Raise suspension and remove support blocks, align dampers, fit bolts and tighten to 100 Nm.
14. Align anti-roll bar link to lower arm.
15. Fit nut and bolt securing anti-roll bar link to lower arm, do not tighten at this stage.
16. Position brake pipe brackets to subframe turret, fit and tighten bolts to 25 Nm.
17. Locate pinion cover on studs and secure to steering rack pinion housing, fit and tighten nuts to 8 Nm.
18. Align and connect steering column intermediate shaft joint to rack pinion.
19. Fit bolt and tighten to 22 Nm.
20. Tighten lower arm to subframe bolts to 85 Nm. - Tighten anti-roll bar link to lower arm nuts and bolts to 35 Nm.

CAUTION: Nuts and bolts must be tightened with the vehicle weight on the suspension.

21. Fit bolt access grommet to subframe.
22. Fit road wheel(s), fit wheel nuts and tighten in a diagonal sequence to 70 Nm.
23. Remove stand(s) and lower vehicle.

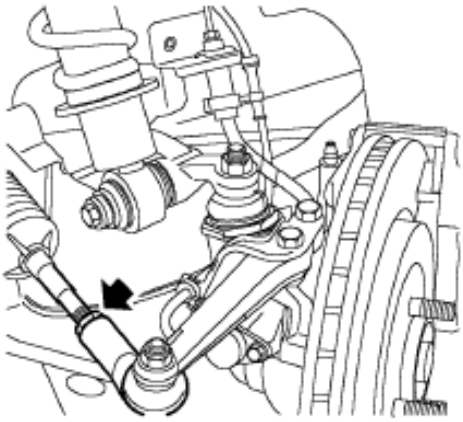
FRONT WHEEL ALIGNMENT

Check

1. Ensure tyre pressures are correct.
2. Ensure that equipment is properly calibrated. NOTE: Only use equipment recommended in the STEP (Service Tools and Equipment Programme) Manual.
3. Check front wheel alignment is within tolerance.

DATA

Front wheel alignment - total toe = -0° 05' ± 0° 5'



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Adjust

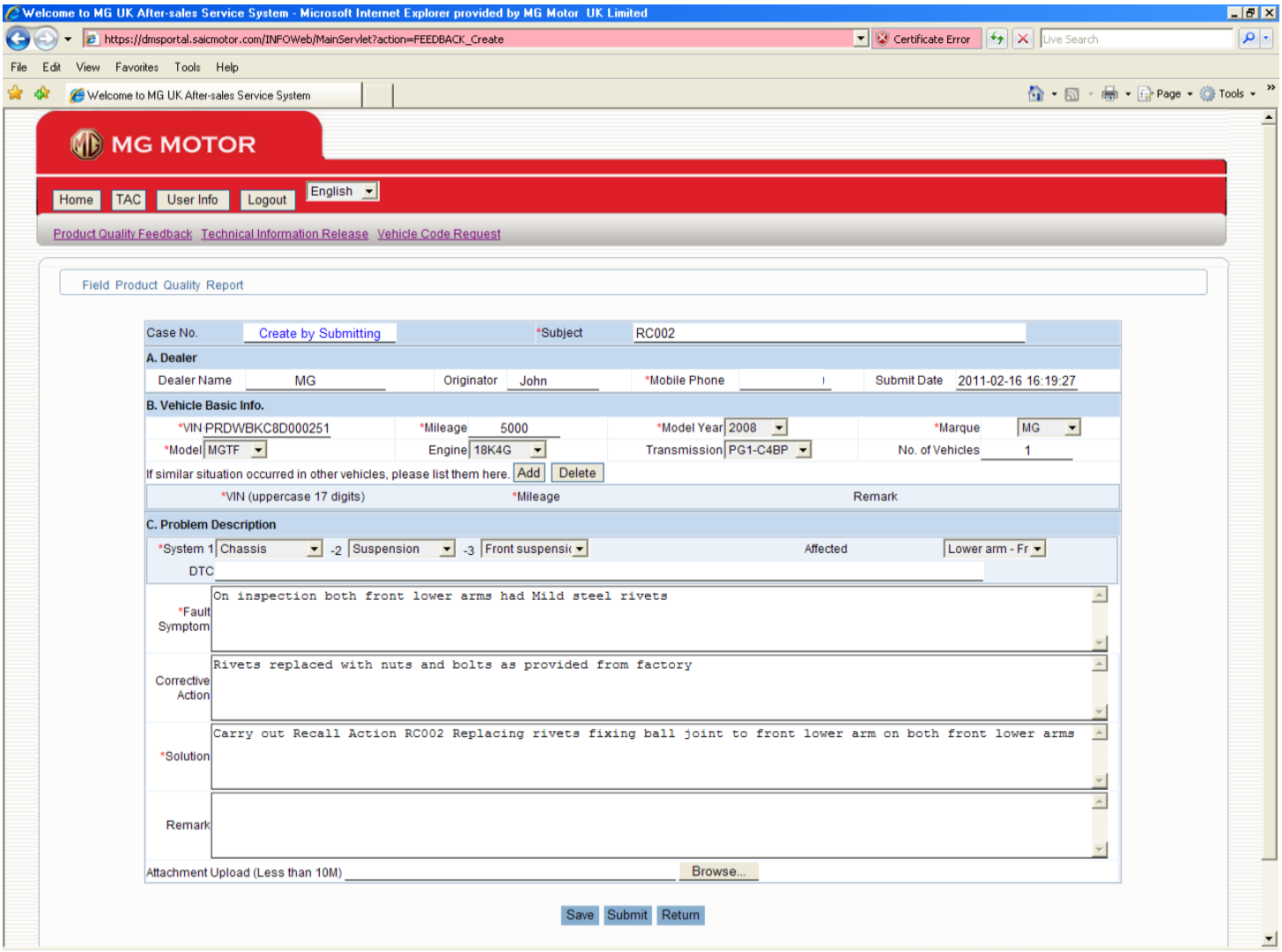
1. Mark track-rods for reference.
2. Loosen track-rod lock nut.
3. Release clip securing gaiter.
4. Adjust track-rod to obtain correct alignment. *CAUTION: Both track-rods must be rotated an equal amount.*
5. Tighten track-rod lock nut to 50 Nm and secure gaiter clip.

Once completed add a Yellow paint spot to the R/H (off side) inner wheel arch adjacent to the horns and above the E mark label as shown below.

SERVICE NOW Product Quality Feedback form:

Complete a SERVICE NOW Product Quality Feedback form:

- Subject - RC002
- System - Chassis, Suspension, Front suspension
- Affected – Lower arm front
- Detail the rivet type for each lower arm in the Fault symptom section
- Detail the action taken in the Remark section



Warranty Information:

Information regarding the claim process and specific repair times and codes will follow shortly in a supplemental communication from MG MOTOR UK LTD.