

2. FINAL OPERATION



Repair-13x02x03x10-01x58-1-13-1.xml



XSL version : 3.02 du 22/07/11

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FRONT DRIVESHAFT LOWER ARM BALL JOINT: REMOVAL - REFITTING



Note, one or more warnings are present in this procedure



Special tooling required	
Tooling kit for replacing lower ball joints.	Tav. 1420
Screw jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.	Tav. 1420-01
Sockets for removing/refitting the lower arm ball joint nut	Tav. 1929

WARNING

No more than one ball joint may be replaced on the same arm. For this purpose, the replacement ball joints are marked with letter "R" engraved on the cover and have a locking spring ring on the lower arm ball joint.



- Ball joint without a locking spring ring and not marked with letter "R" = standard part: can be replaced.
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Ball joint with a locking spring ring and with marking "R" = part already replaced, another replacement prohibited, always replace the complete arm.

WARNING



To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair:



(see 31A, Front axle components, Front axle components: Precautions for the repair) ,



Vehicle: Precautions for the repair .

Location and specifications (tightening torques, parts always to be replaced, etc.)(see 31A, Front

REMOVAL

1. REMOVAL PREPARATION OPERATION



Position the vehicle on a two-post lift [Vehicle: Towing and lifting](#) .



Remove the front wheel on the side concerned ([see 31A, Front axle components, Front hub carrier assembly: Exploded view](#)) .



Remove:

-
- the front section of the front wheel arch liner [Exterior body front trim assembly: Exploded view](#) ,
- the engine undertray,
- the front bumper [Front bumper assembly: Exploded view](#) ,
- the radiator mounting cross member ([see 31A, Front axle components, Front axle assembly: Exploded view](#)) .

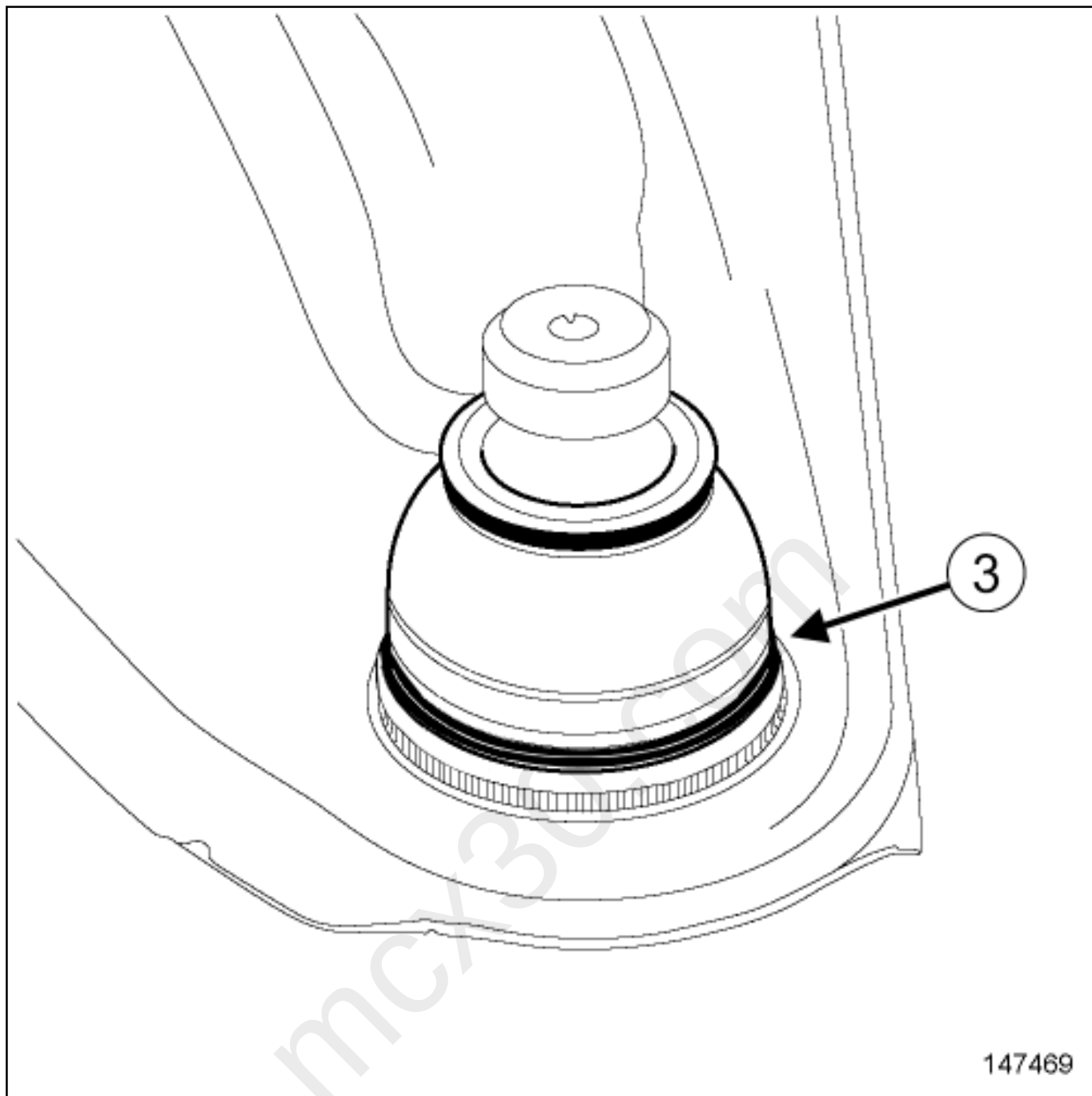


Remove the front driveshaft lower arm ([see 31A, Front axle components, Front axle assembly: Exploded view](#)) .

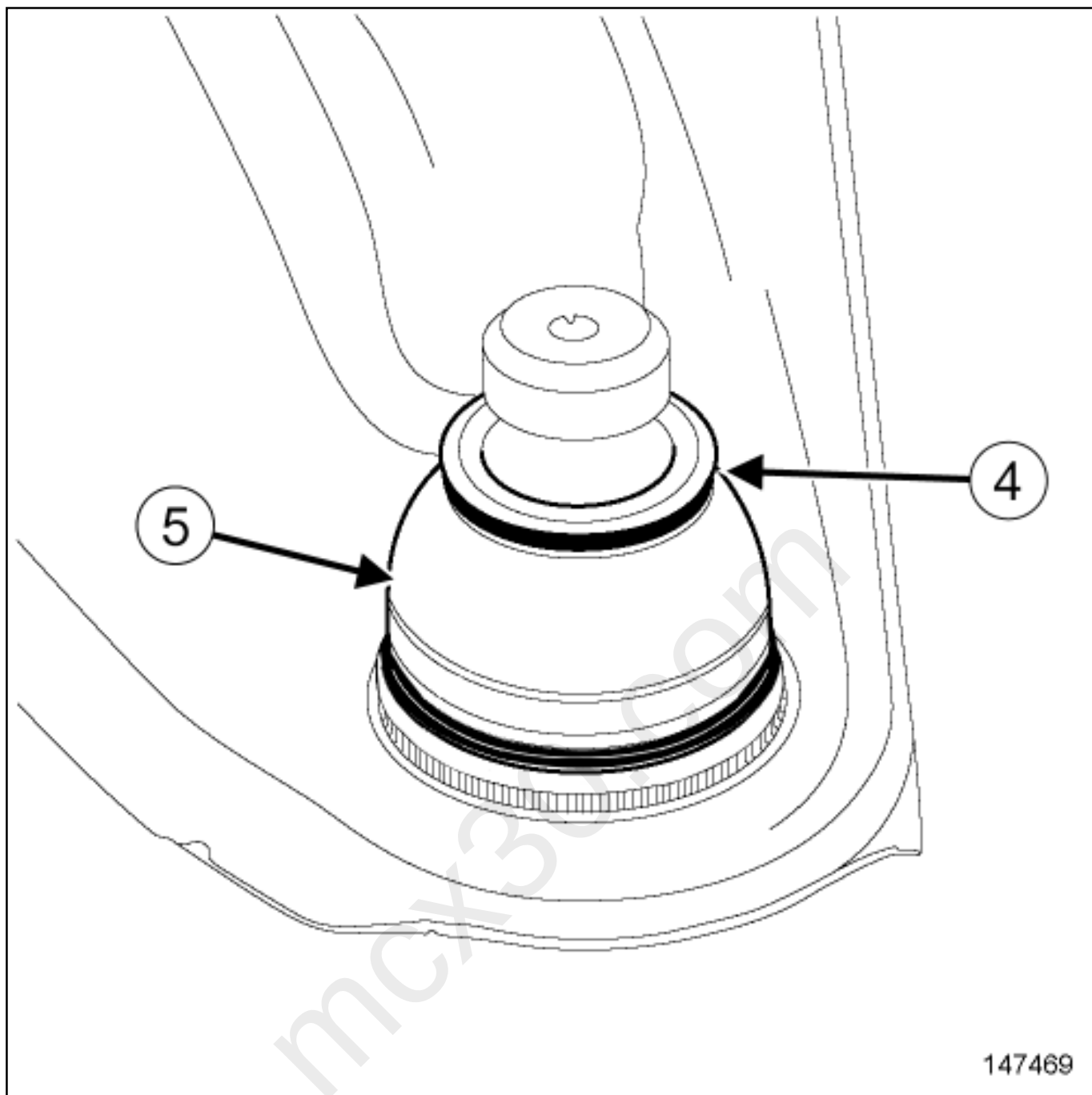


Clean the lower arm using a clean cloth [Vehicle: Parts and consumables for the repair](#) .

2. REMOVAL OPERATION



Remove the clip(3) of the ball joint gaiter using a screwdriver.



Remove:



the clips(4) of the ball joint gaiter using a screwdriver,

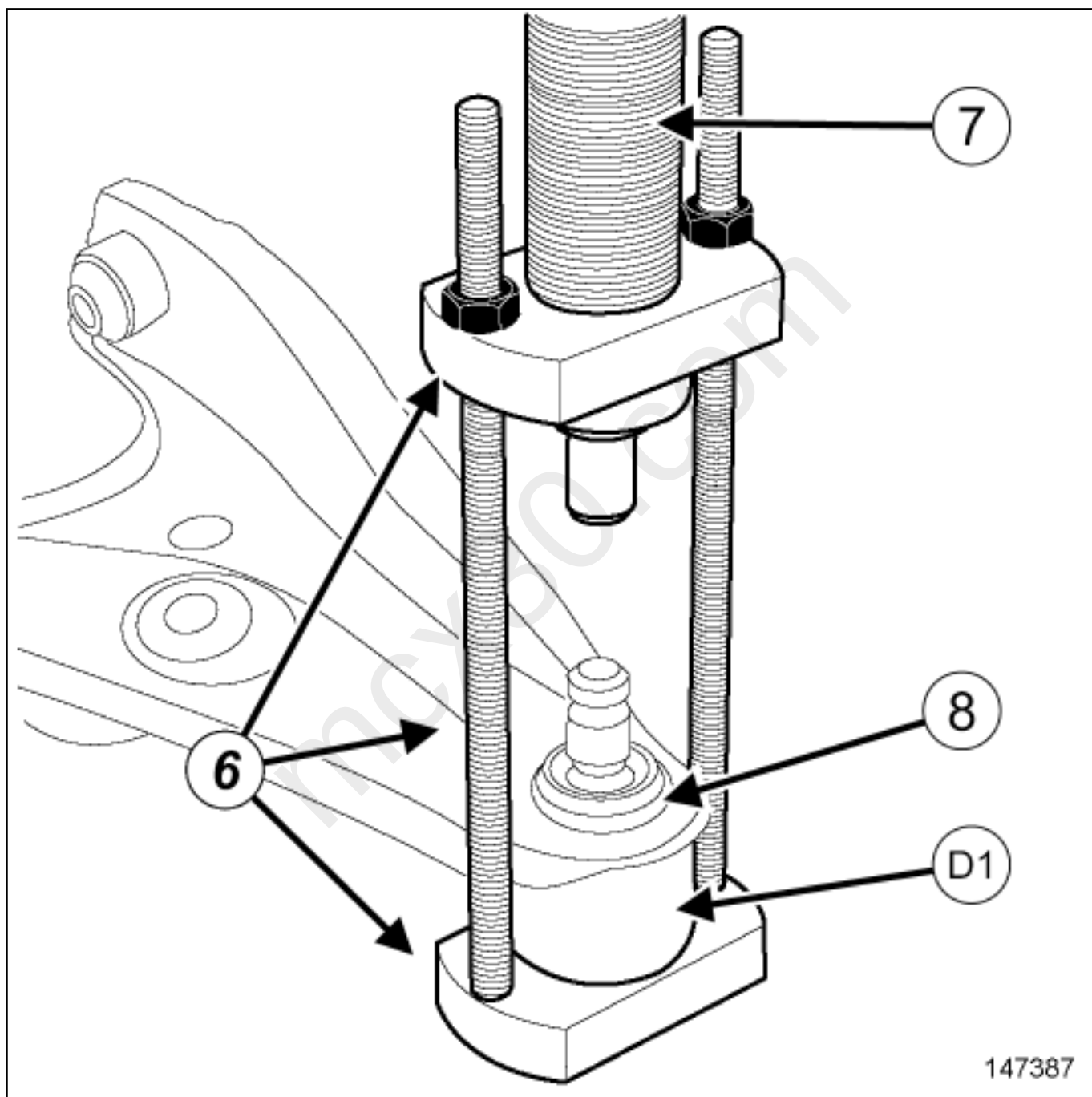


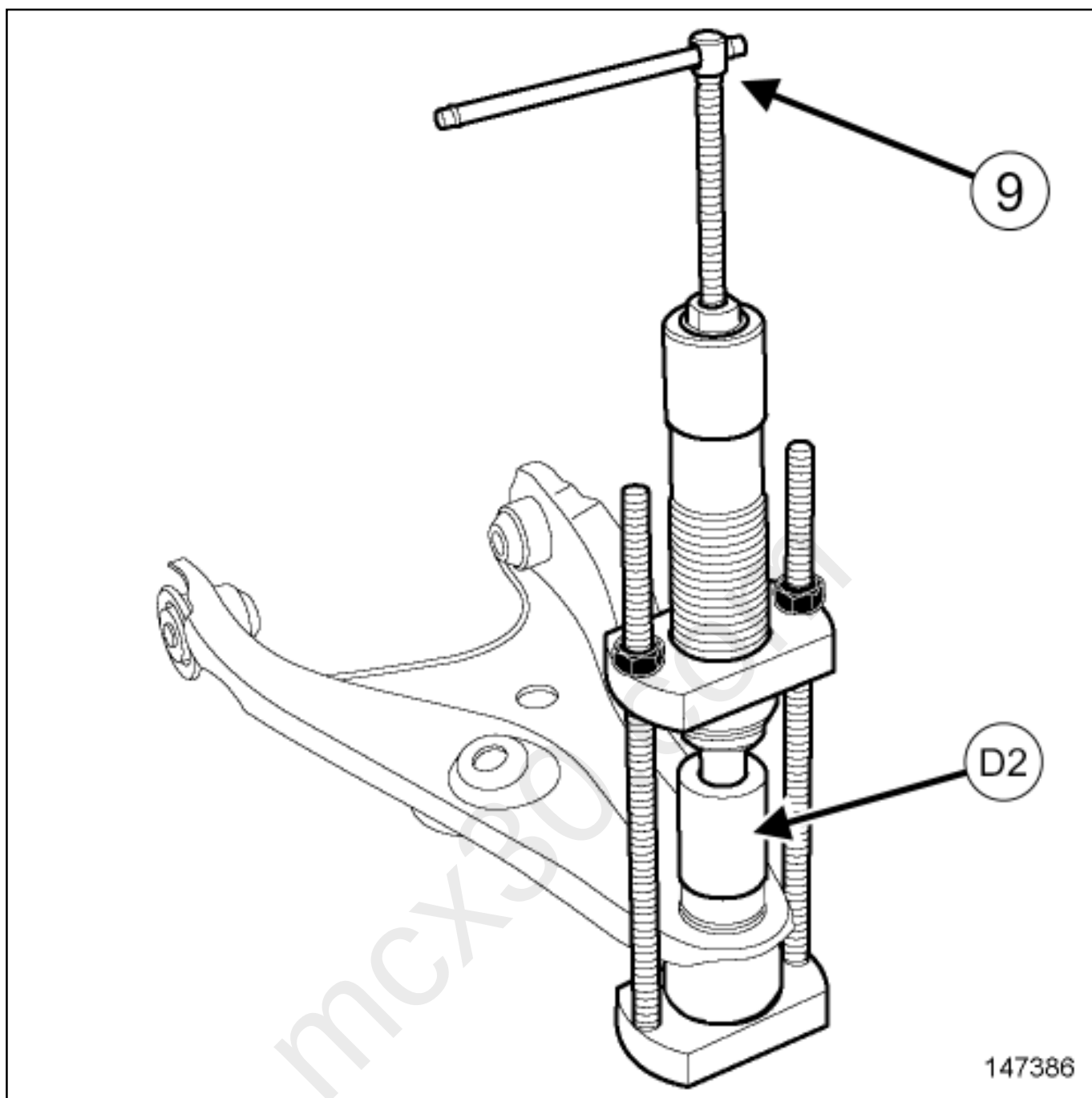
the lower arm ball joint gaiter(5) .



Note:

Cover the threaded rods using a sheath or adhesive tape in order not to damage the anti-corrosion protection of the lower arm.





Set up the toolTooling kit for replacing lower ball joints.(Tav. 1420) (6) by assembling the two plates, the two threaded rods, and the toolScrew jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850. (Tav. 1420-01) (7) . Ensure that the two plates stay parallel (adjust the nuts).



Fit in the assembly of the toolsTooling kit for replacing lower ball joints.(Tav. 1420) and Screw jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) :



the ring(D1) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) ,



the lower arm by positioning the ball joint in the ring(D1) ,

the ring(D2) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) on the lower arm ball joint(8) .

Extract the lower arm ball joint(8) by operating the jack(9) of the toolScrew jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) .

Remove:

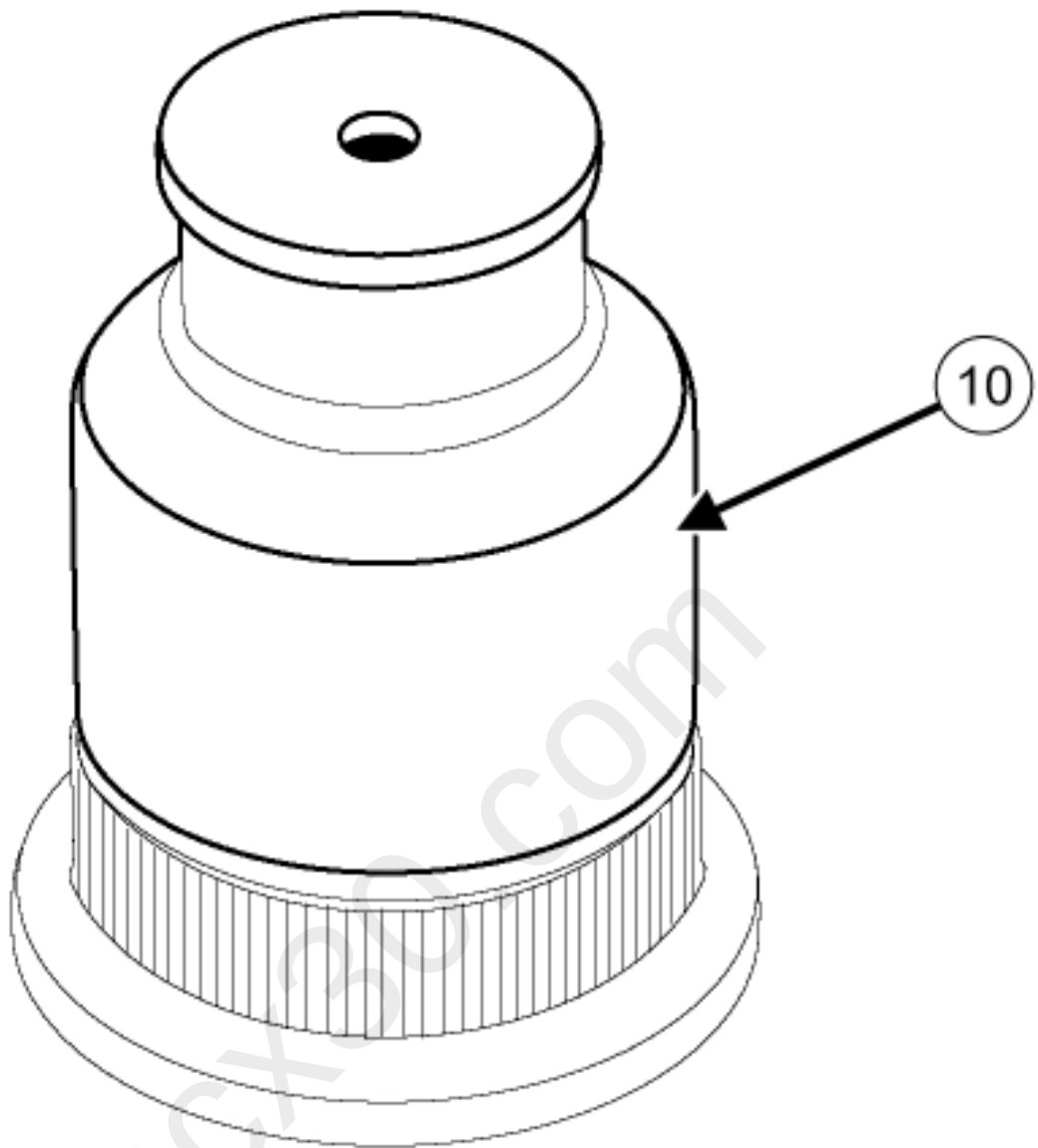
the rings(D1) and (D2) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) ,

the assembly of the toolsTooling kit for replacing lower ball joints.(Tav. 1420) and Screw jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) .

REFITTING

1. REFITTING PREPARATION OPERATION

Clean the mating face of the ball joint on the lower arm using a clean cloth [Vehicle: Parts and consumables for the repair](#) .



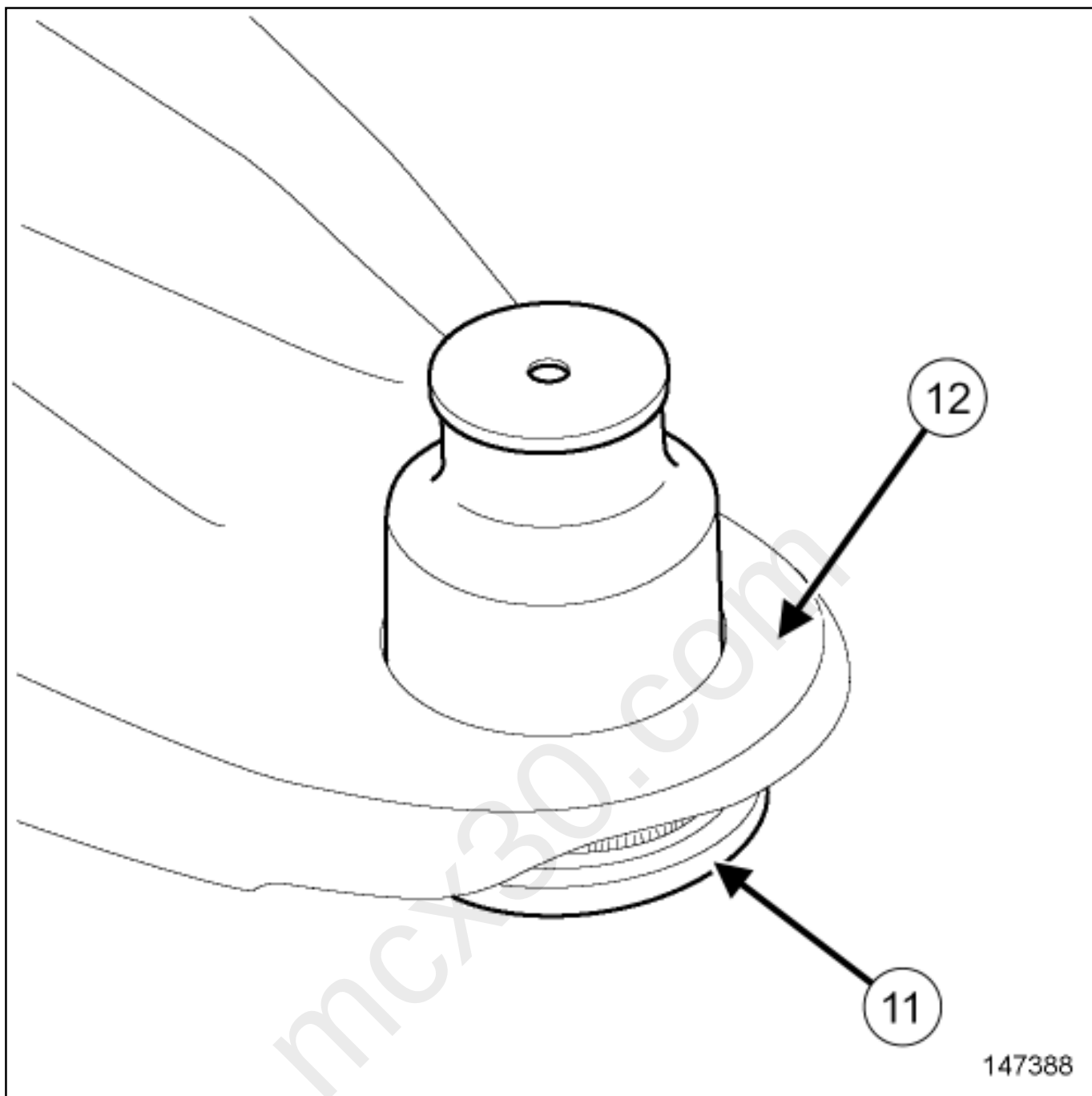
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Note:



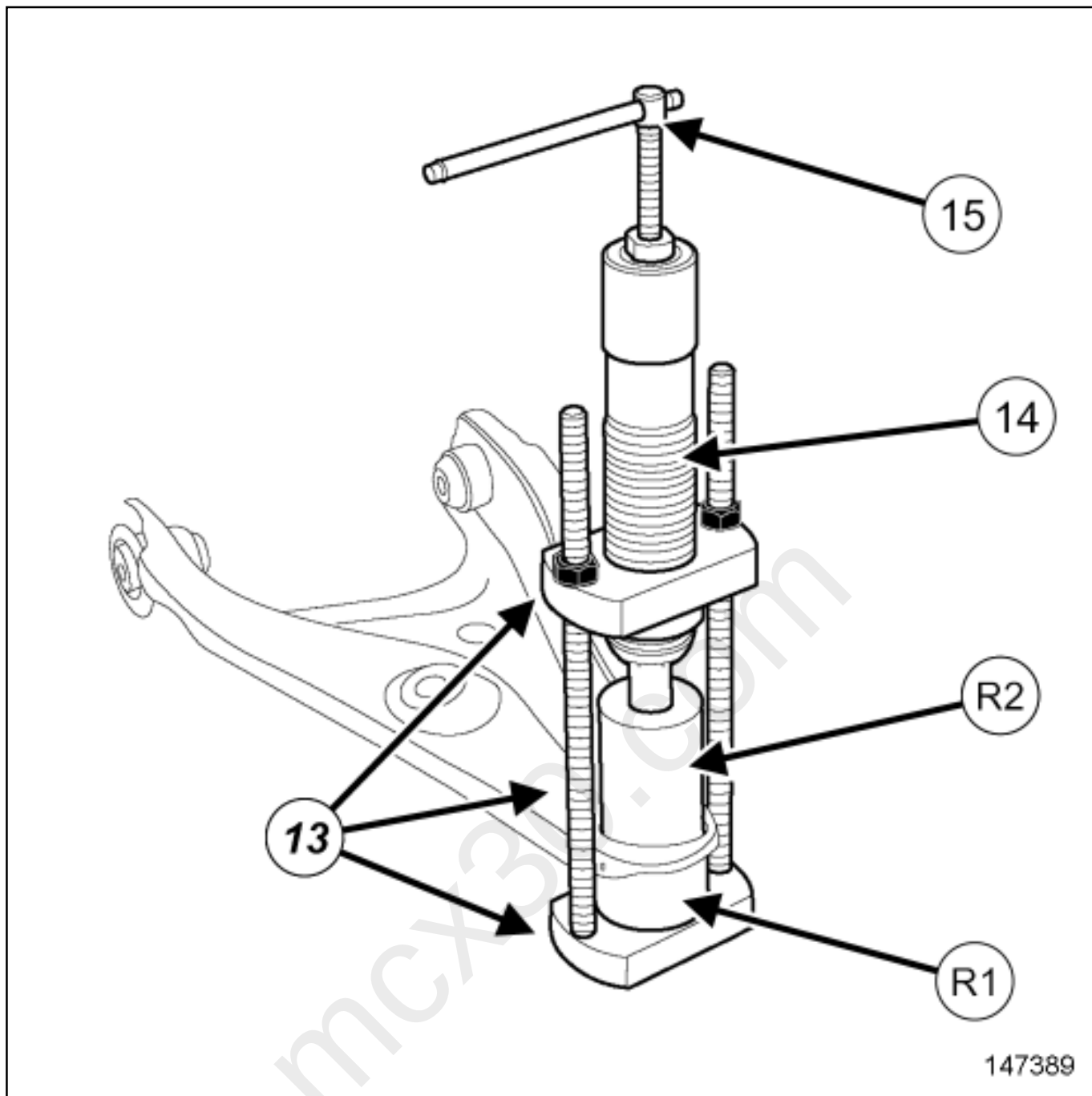
The lower arm ball joint (replacement part) is equipped with a protective cover(10) .

Do not remove the protective cover before the end of the operations for refitting the ball joint.



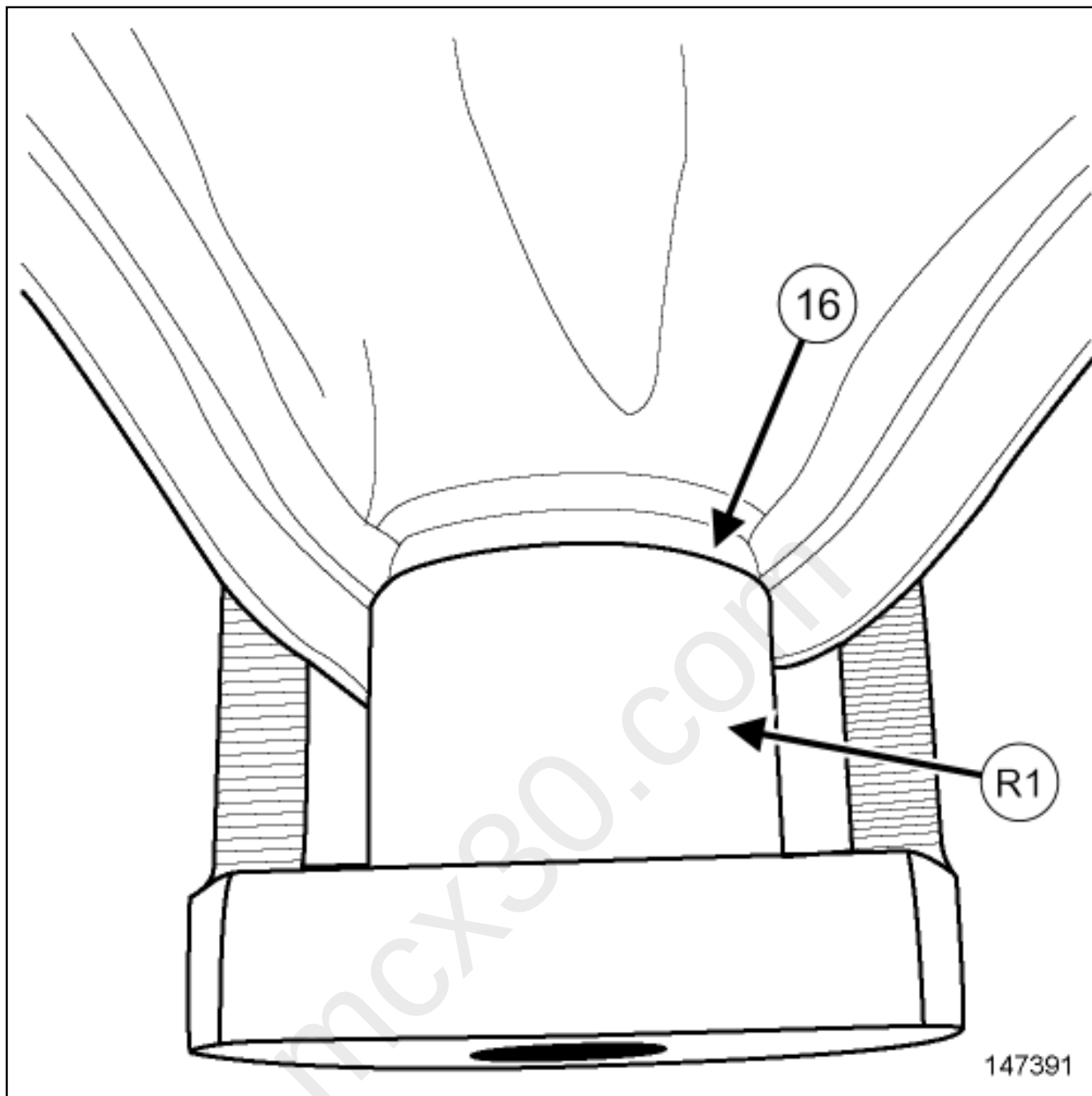
Position the new lower arm ball joint(11) on the front driveshaft lower arm(12) .

2. REFITTING OPERATION



Fit in the assembly of the tools Tooling kit for replacing lower ball joints.(Tav. 1420) (13) and Screw jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) :

- the ring(R1) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) ,
- the lower arm with the new ball joint by positioning the ball joint in the ring(R1) ,
- the ring(R2) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) on the lower arm ball joint.



Fit the new ball joint(11) in the lower arm by operating the jack(15) of the toolScrew jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) until the ring(R1) contacts the lower arm at (16) .



Turn the jack(15) one additional turn to finalise the geometric position of the lower arm ball joint.

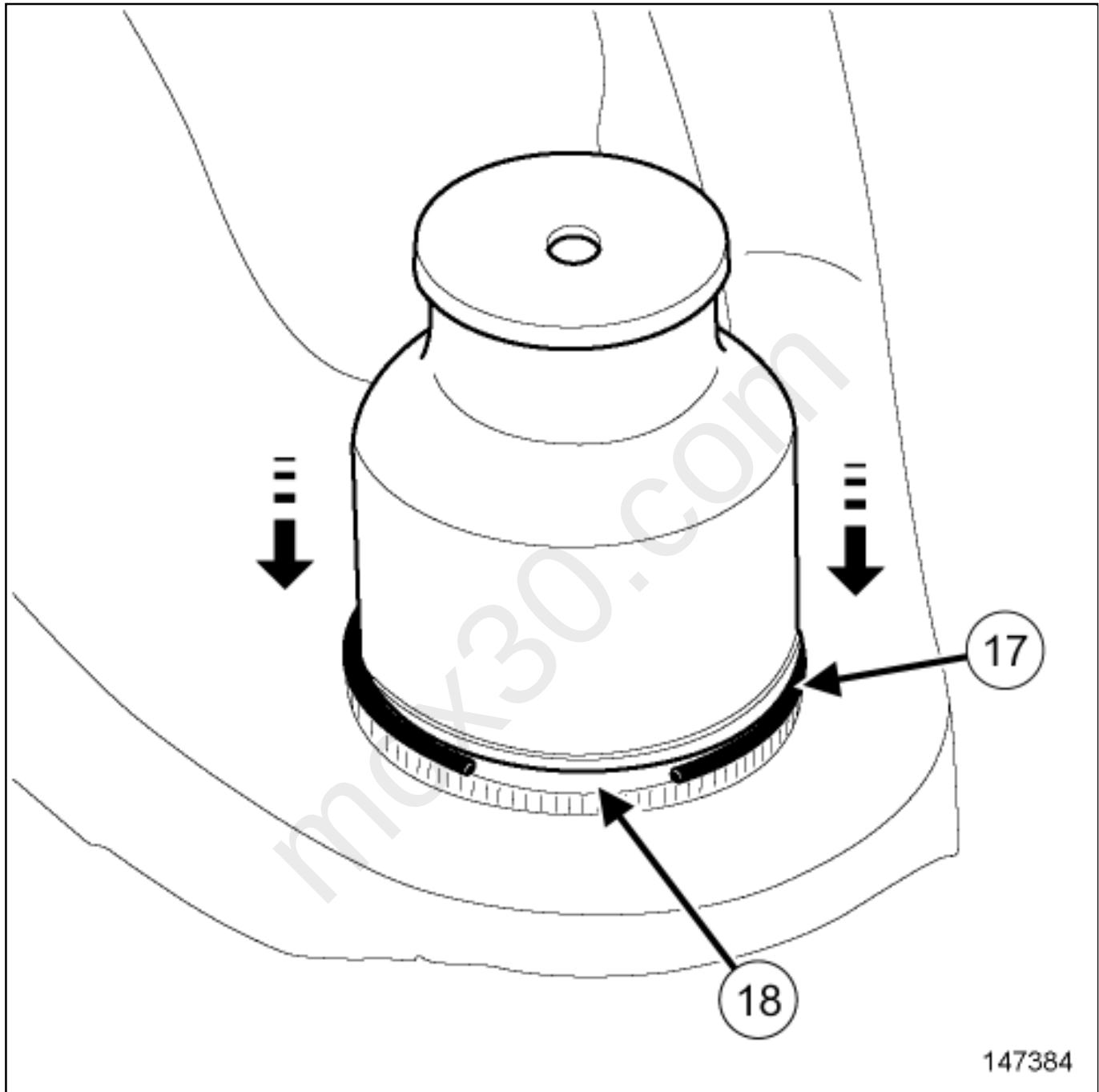


Remove:



the rings(R1) and (R2) of the toolSockets for removing/refitting the lower arm ball joint nut(Tav. 1929) ,

the assembly of the toolsTooling kit for replacing lower ball joints.(Tav. 1420) and Screw jack for tools Tav. 1420, Tav.1050-04 , Tar. 1454, Tar. 1850.(Tav. 1420-01) .



Fit the locking spring ring(17) in the groove(18) of the ball joint by sliding it downwards on the protective cover in the direction of the arrows.