Diana 75 dismantling/reassembly (English)
May 1 2011 at 8:24 AM

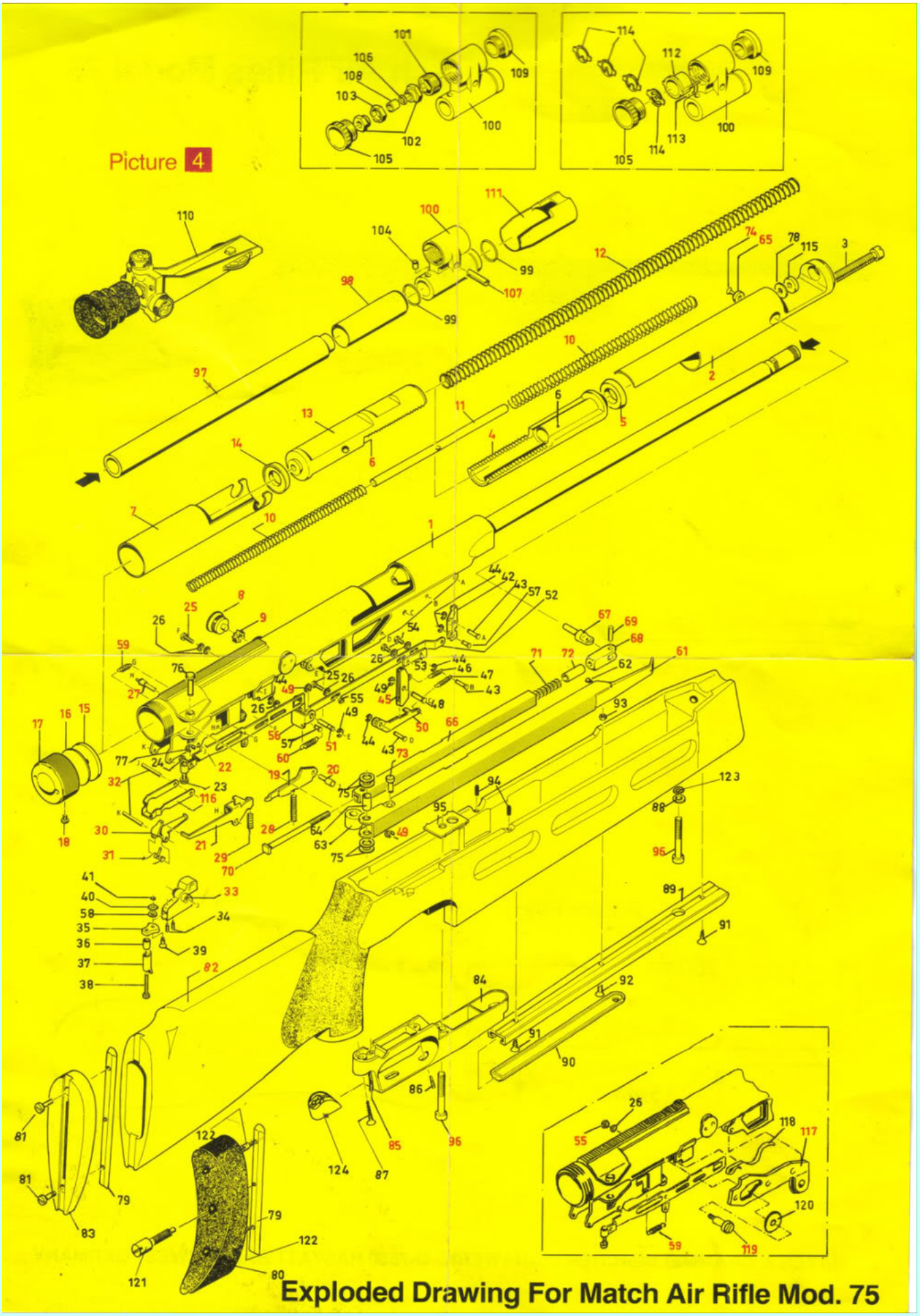
Response to Diana/Milbro manuals

With many thanks to Andy for taking the time to scan these and to Clark for the photos further down:

List of instructions

List of diagrams (enclosed with last page)

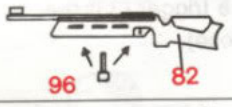
Picture 4



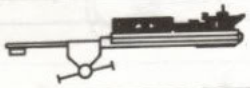
Exploded Drawing For Match Air Rifle Mod. 75

General dismantling of the match air rifle model 75

1. Unload and uncock rifle and remove diopter.



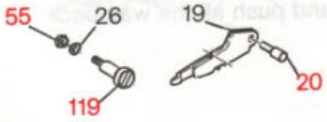
2. Loosen and unscrew stock screws (96), remove stock (82) from the action.



3. Hold the action at the barrel (directly in front of the cylinder) in a vice (trigger upside). Use protective rubber vice jaws.

4. Remove the screw (25) of the safety rail (22) and of the end cap (18).

5. Release safety rail springs (59) (2 pieces).

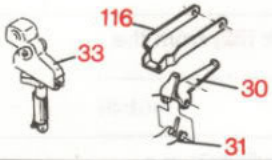


6. Release nut (55) from bolt (119) (at safety rail) (22), unscrew bolt and take out pin (20).

7. Unhook rear and front hook spring (29 + 28) with a screw driver.

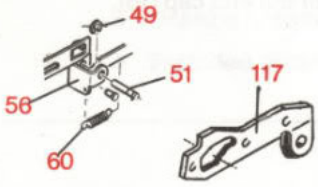
8. Take out front hook by flatnose pliers.

9. Tap trigger pin and trigger latch pin (32) (with pointed punch) out of the action housing (watch trigger latch spring) (31).

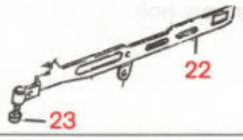


10. Trigger (33), trigger spring lever (116), trigger latch (30) and spring (31) are released now. Remove all parts. (When dismantling the trigger (33) the cocking lever (61) has to be partly opened – do not close).

11. Tap out rear hook pin (27) towards the right side.



12. Remove spring (60), take off circlip (49), take out the pin with notch (51) and push the safety lever (117) forwards into the frame of the housing. Disengage lever (56).



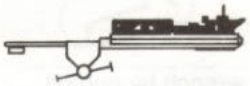
13. Release safety rail (22) at the rear side (screw 23) and push all the way back towards the end cap.

14. Remove rear hook (21) hold with flatnose pliers at the back end, lift front end up then bring back end up and pull out.

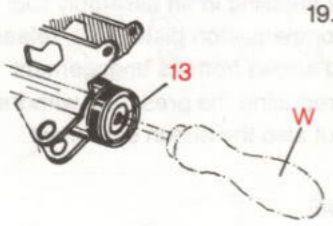
15. Raise safety rail (22) at the rear end, turn it (to the left) and remove it towards the action housing (i. e. towards the barrel).

16. Take the action out of the vice, turn it 90° and hold it again in the vice on the flat surface where the stock rests.

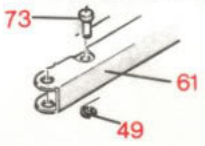
17. Loosen and screw off end cap (17) with a pin wrench.



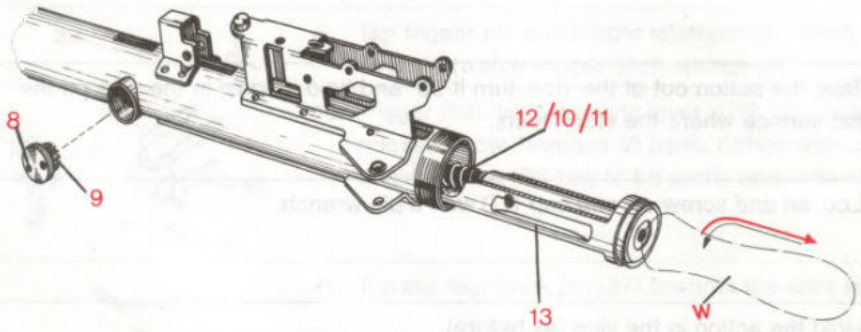
18. Hold the action in the vice (as before).

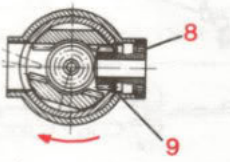


19. Introduce assembly tool (W) (picture 3) into compensation piston (13) (in case there is any resistance when introducing the assembly tool, the cocking lever has to be fully cocked). When returning the lever (61) into normal position, pull trigger and raise safety lever (117). Keep hold of cocking lever during this operation.



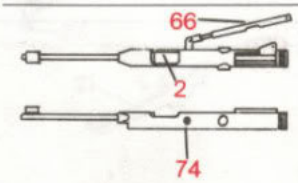
20. Remove circlip (49) at the lever (61) and tap pin out (73).





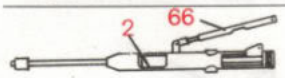
21. Remove axis screw (8) and cam wheel (9) with a pin wrench by putting pressure onto the compensation piston (13) by pressing in an assembly tool (W). Then, retaining counter-pressure on the compensation piston (13), release the latter with a slight turn to the right (see red arrow) from its engagement with the second cam wheel (9), and, carefully reducing the pressure, withdraw the piston from the compensation tube; take out also the piston spring set (12/11/10)

22. Screw out second axis screw (8) and cam wheel.

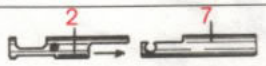


23. Push cylinder (2) with pull rod (66) to the end of cylinder until screw (74) appears in auxiliary assembly hole.

24. Take off screw (74).



25. Pull back cylinder (2) (with pull rod (66) until middle of loading platform, turn cylinder with pull rod (66) and take rod out.



26. Remove both cylinders (2 + 7).

27. Now the compression piston (4) can be pulled out of the cylinder (2).

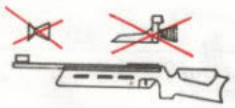
Dismantling front sight housing, barrel weight and barrel sleeve

1. Remove barrel weight (111).

2. Hold the barrel at the front sight housing (100) in a vice, drive sprung pin (107) out of the hole by means of flat nosed punch.
3. Hold barrel at the barrel weight (98) in a vice. Place a piece of wood or plastic on the side of the front sight housing and tap it off towards the muzzle.

4. Remove barrel weight (98) and sleeve (97) by pulling.
5. Also remove barrel sleeve (97).

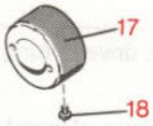
Changing the piston springs



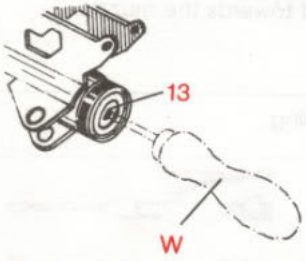
1. Rifle is unloaded, uncocked and diopter removed.

2. Loosen and unscrew stock screws (96), remove stock from the action (82).

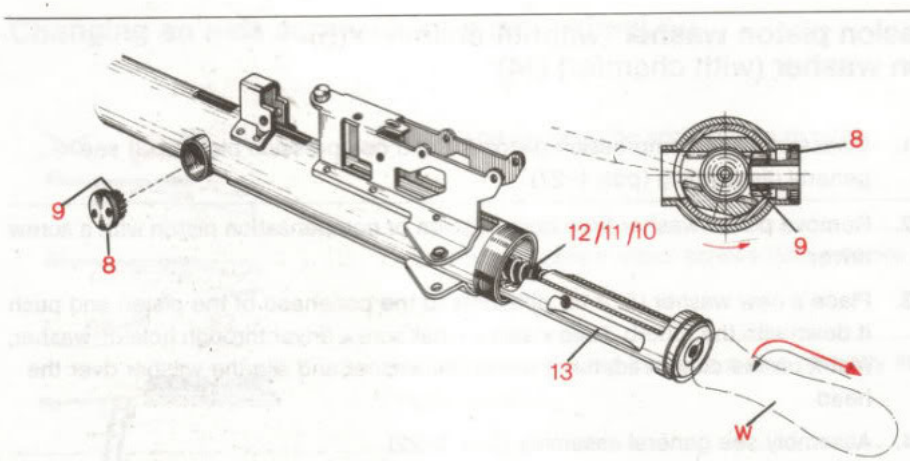
3. Hold the system in a vice at the flat surface of the cylinder.



4. Screw out end cap screw (18) and remove end cap (17) by a pin wrench.



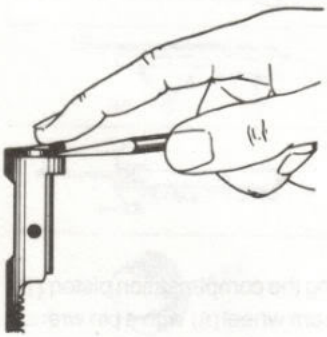
5. Introduce the assembly tool (W) into the compensation piston (13). (In case there is any resistance when introducing the assembly tool, the lever (61) has to be fully cocked. When returning lever (61) in normal position – pull trigger – and raise safety lever (117). Keep hold of cocking lever during this operation.



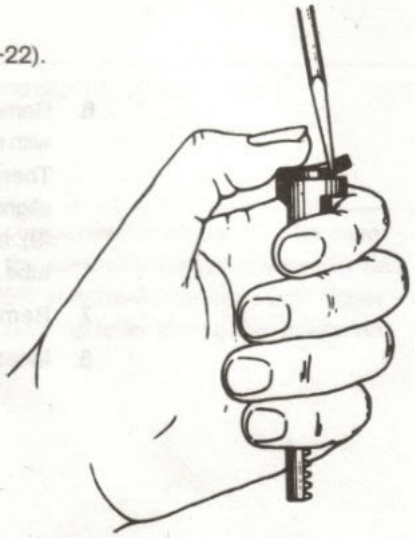
6. Remove cam wheel and axis screw (8 + 9) by presseng the compensation piston (13) with the introduced assembly tool (W) and screw out cam wheel (8) with a pin wrench. Then, keeping pressure on the compensation piston (13), release the latter with a slight turn to the right (see red arrow) from its engagement with the second cam wheel (9), and, carefully reducing the pressure, pull out the piston from the compensation tube.
7. Remove piston spring set (12/11/10).
8. Insert new piston springs (12/11/10) – assemble vica versa.

Replacing the compression piston washer (without chamfer) (5) **or compensation piston washer** (with chamfer) (14)

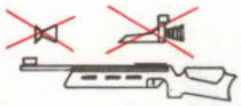
1. Disassembly of compression piston (4) and compression piston (13) see general dismantling (pos. 1–27).



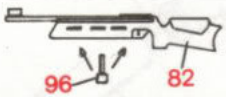
2. Remove piston washer from compression or compensation piston with a screw driver.
3. Place a new washer (5 or 14) obliquely to the conehead of the piston and push it down with the thumb. Then insert a small screw driver through hole of washer, rest it on the conehead, run it round the washer and slip the washer over the head.
4. Assembly see general assembly (pos. 3–22).



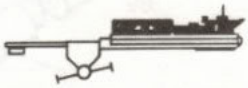
Changing an axis screw (8) or a cam wheel (9)



1. Unload and uncock rifle and remove diopter.

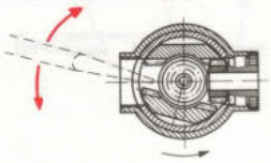


2. Loosen and unscrew stock screws (96), remove stock (82) from the action.

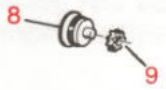


3. Hold the action at the barrel in a vice (directly in front of the cylinder) (trigger upside).

4. Loosen and unscrew the axis screw (8) with a pin wrench (remove cocking lever first when working on this side) (66). Defective cam wheel (9) has to be pulled out.



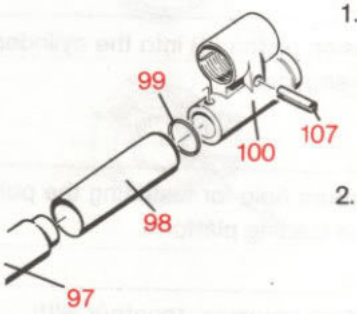
5. Insert screw driver blade in cam axis screw whole and force apart the visible ratchet rails; i. e. press the upper rail upwards, and the lower one downwards until the rearmost teeth are in full engagement with the cam wheel, so that the necessary gap is acquired to insert the cam wheel.



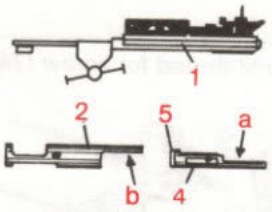
6. Screw in axis screws (8) with cam wheel (9).

DO NOT TRY TO ENGAGE THE TEETH BY COCKING THE LEVER!!

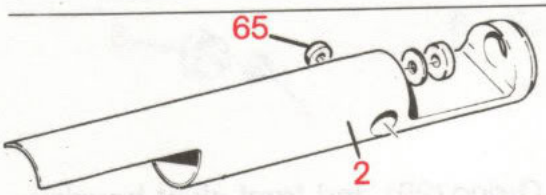
Assembly of match air rifle model 75



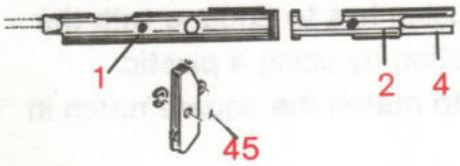
1. Push barrel sleeve (97), barrel weight (98), O-ring (99) and front sight housing (100) over the barrel (spring in the front sight housing has to engage with the barrel notch). Push all these parts towards the action by using a plastic hammer. The hole in the front sight housing has to match the square notch in the barrel.
2. Drive in clamping spring pin sleeve (107).



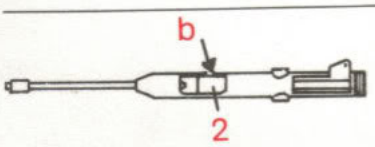
3. Hold the action at the barrel (directly in front of the cylinder) in a vice, trigger upwards.
4. Slide the compression piston (4) with the washer (5) in front into the compression tube until it hits the front end with an even twisting movement. The gear rack of the compression piston (4) has to be opposite to the compression delete tube bar (b).



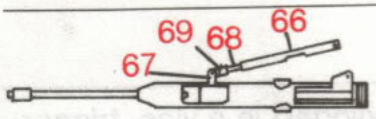
5. Insert disc (65) into the compression t



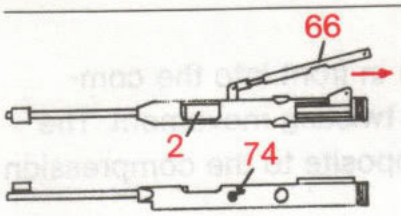
6. Slide compression tube (2) including compres
(1). By doing this the catch (45) should not be



7. Push compression piston (2) as far as hole (b)
rod for cocking lever) shows in the middle of th

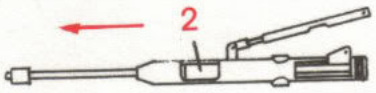


8. Insert hinge of pull rod (67/68/69) (with flat sur
pull rod (66).



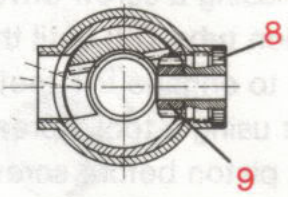
9. Pull compression tube (2) with rod no.(66)rear
shows in the hole.

10. Screw in no.(74)

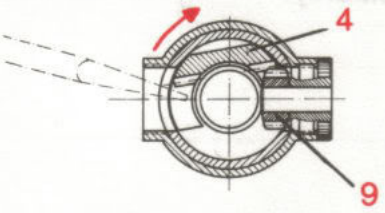


11. Push compression tube (2) forwards until it hit

12. Insert tube (7) into the cylinder (1) until the ho
the threaded holes of the cylinder (1).

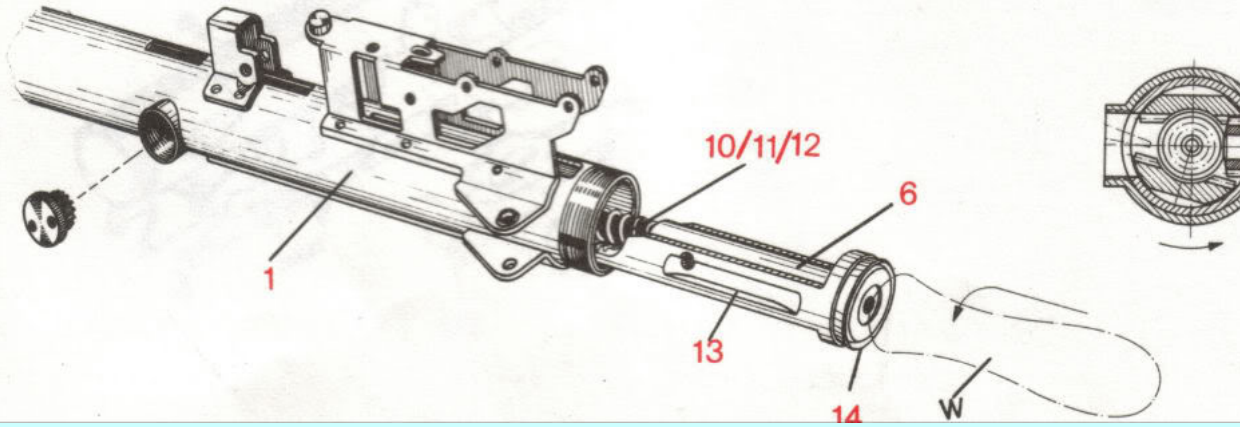


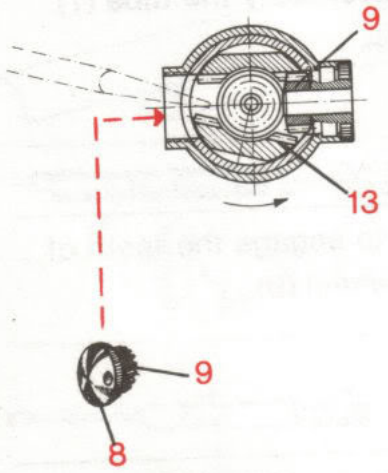
13. Screw in axis screw by hand (8) with cam wheel has to be turned, so the axis screw can pass.
14. Fasten axis screw (8) with pin wrench.



15. Insert screw driver into the empty screw hole an the compression piston (4) with the ones of the

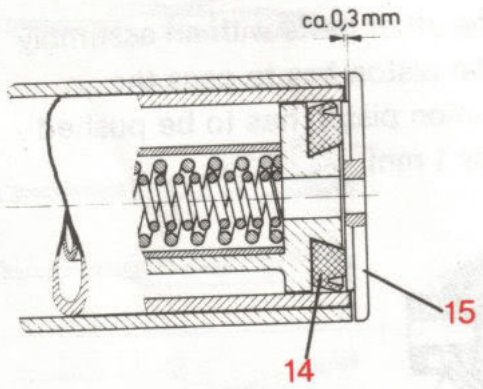
16. Insert the set of springs (12 + 10) together with t compensation piston (13) complete with the was
17. Insert compensation piston (13) together with the rod (W) into the cylinder (1). The gear rack of the already mounted cam wheel (9). The compensat in until the cylinder protrudes the washer (14) by



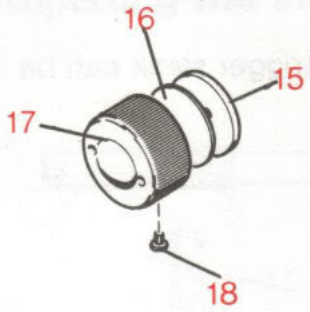


It might be necessary to straighten out the
through the empty thread hole. Insert the c
teeth of it hit the cam wheel (9), then turn
screw in the axis screw (8) and cam wheel
both geared racks of compression and con
in axis screw in order to be able to engage

18. Fasten axis screw (8) with pin wrench.



19. When assembled both pistons springs and
disc (15) has to show a gap in between th
when pressing it onto the washer of the c

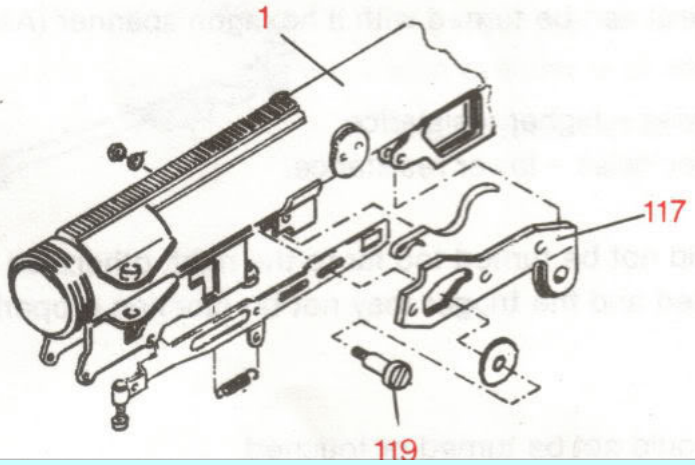


20. Disc (16 + 15) are to be placed into the end ca
onto the cylinder firmly until hole lines up to ta

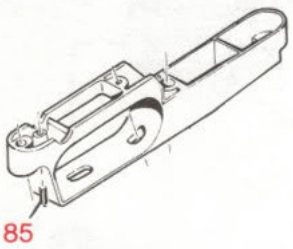
21. Secure end cap (17) with screw (18).

22. Continue the assembly vica versa to the disas
front pages.

When assembling the screw (119) please reme
of 2 mm in between the stop face of safety le



Adjusting the trigger pull



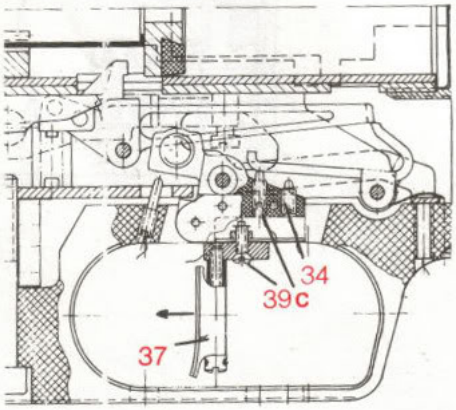
The weight of the trigger pull and in the same relation of the trigger slack
adjusted with screw (85) within 100–400 grams.

When turning clockwise – higher weight

When turning anti clockwise – lower weight

Adjusting of the double pull

1. The rifle has to be uncocked and unloaded.
2. Screw (39) on trigger tongue has to be loosened. Push trigger forwards.
3. Screw (34) (not sealed) can be turned with a hexagon spanne



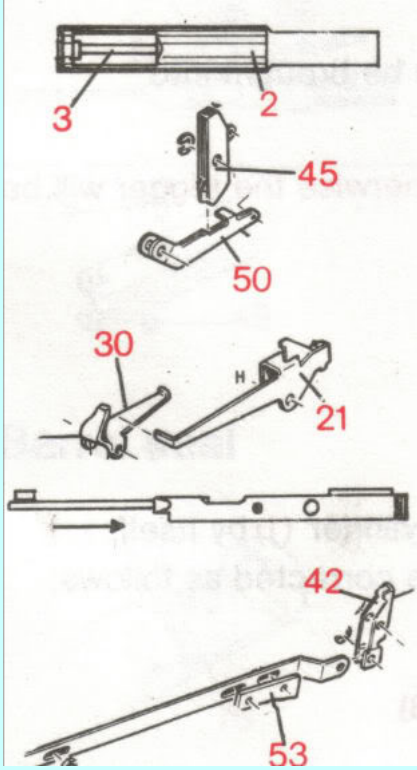
When turning clockwise – higher resistance.
When turning anti clockwise – lower resistance.

The screw (34) should not be turned too far to the right, other
slack will be eliminated and the trigger may not be function pr

ATTENTION:

The sealed screw should not be turned or touched.
This in only for adjustment by the factory!

Adjusting the index safety



The catch is done by lever (45) which slides over the thr
neath the compression cylinder) (2). The head of the scr
lever (45) not engaging until the lever (50) holds it.

The rear hook (21) should only engage with trigger latch
in the rearmost position.

This function can be adjusted by turning the screw (3) in
(2)

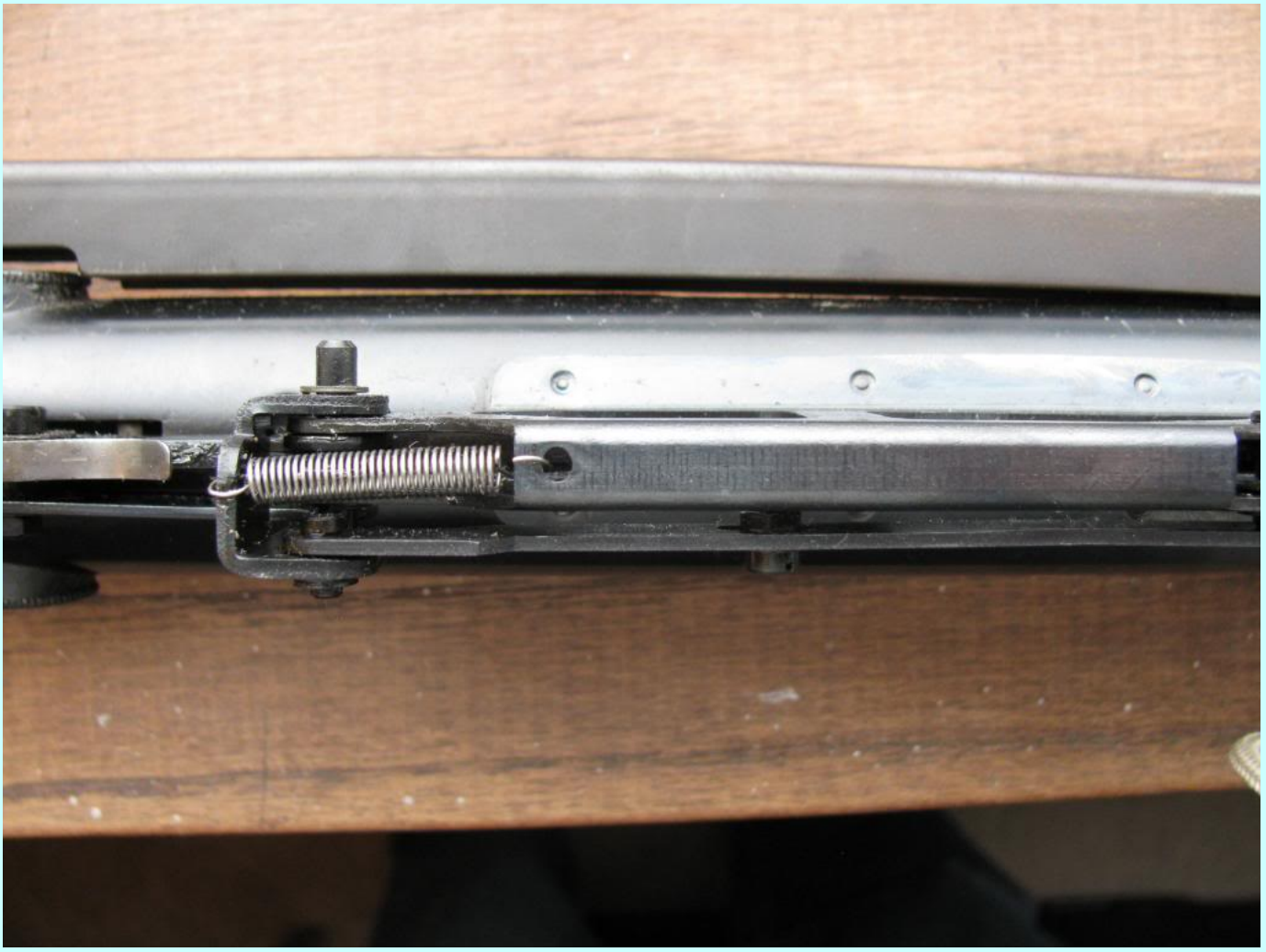
This adjustment can be done even when the air rifle is a
on the front sight of the cylinder just above where the st

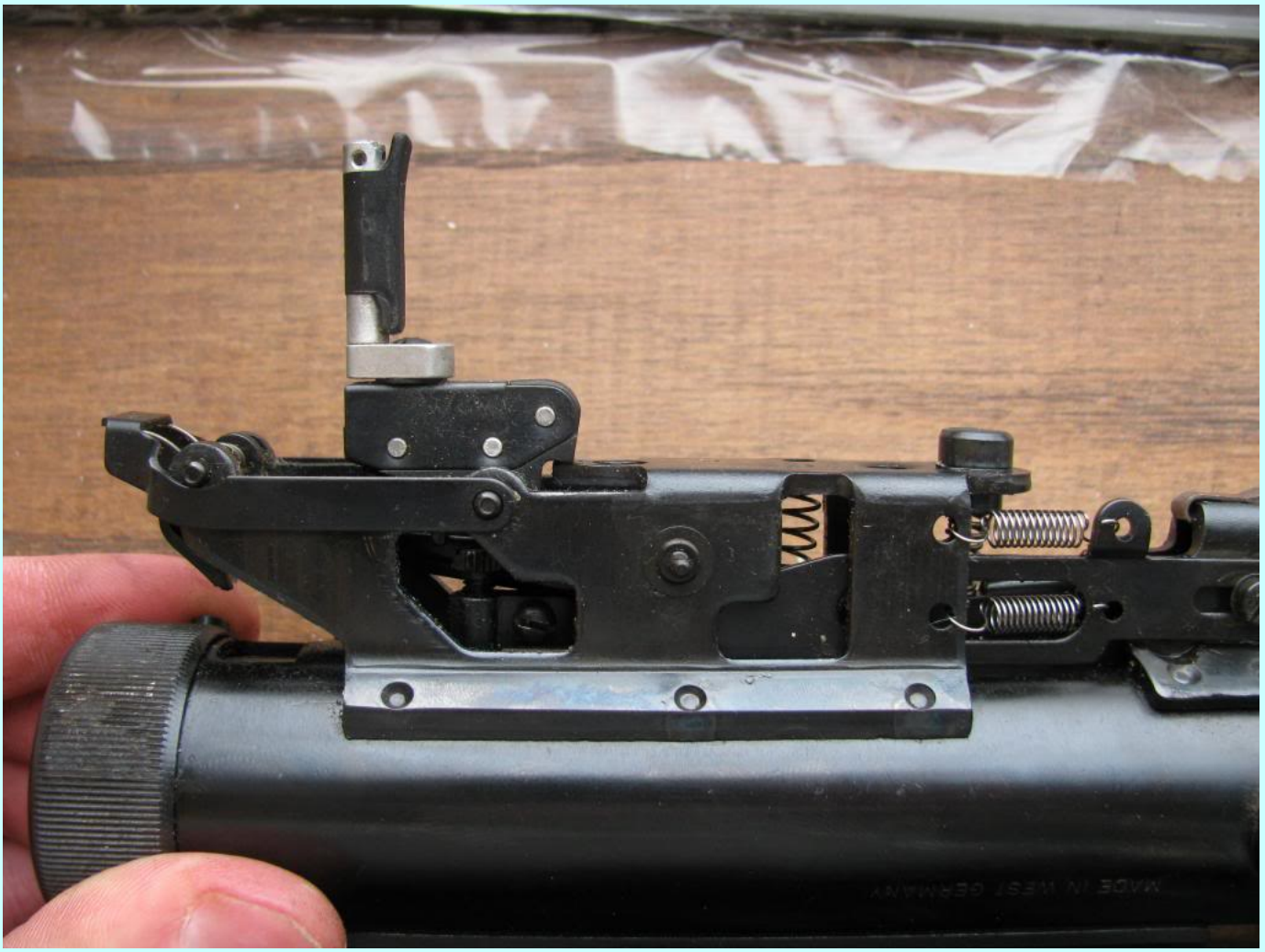
Just the safety lever (42) has to be disassembled.

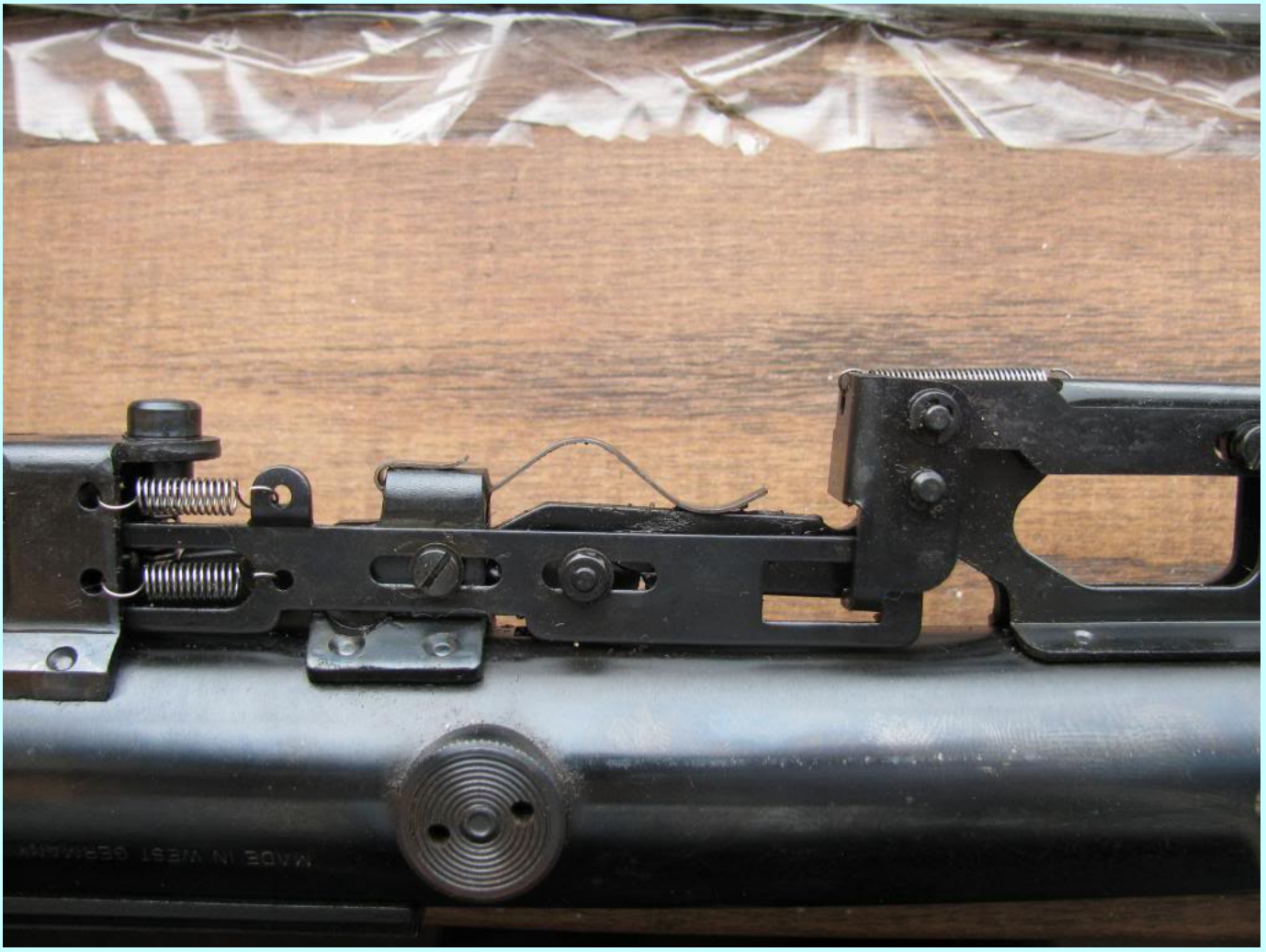
The lever (45) which is held by the lever (50) is only rele
sion cylinder is closed.

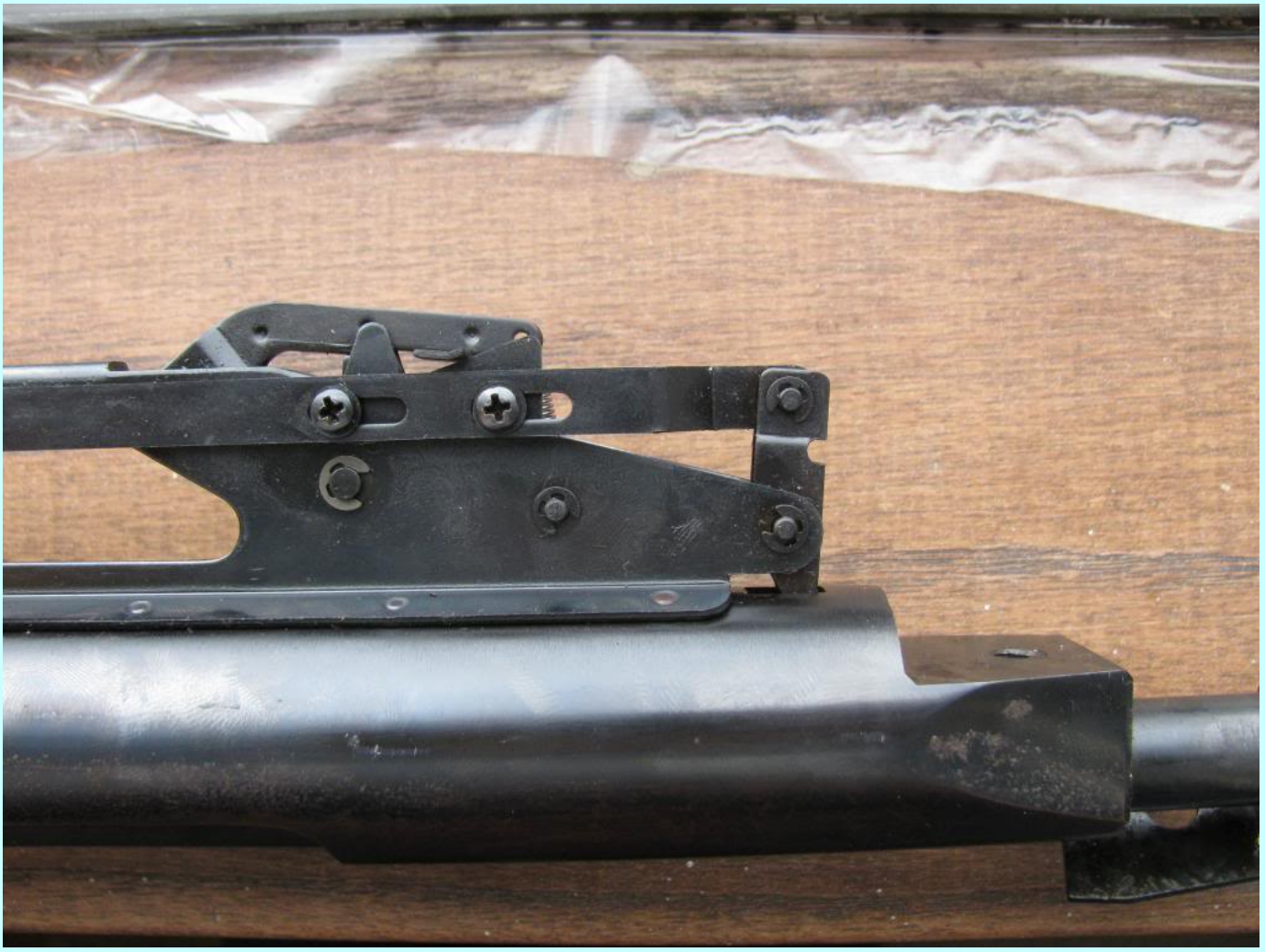
The release can be also adjusted by shifting the transpo

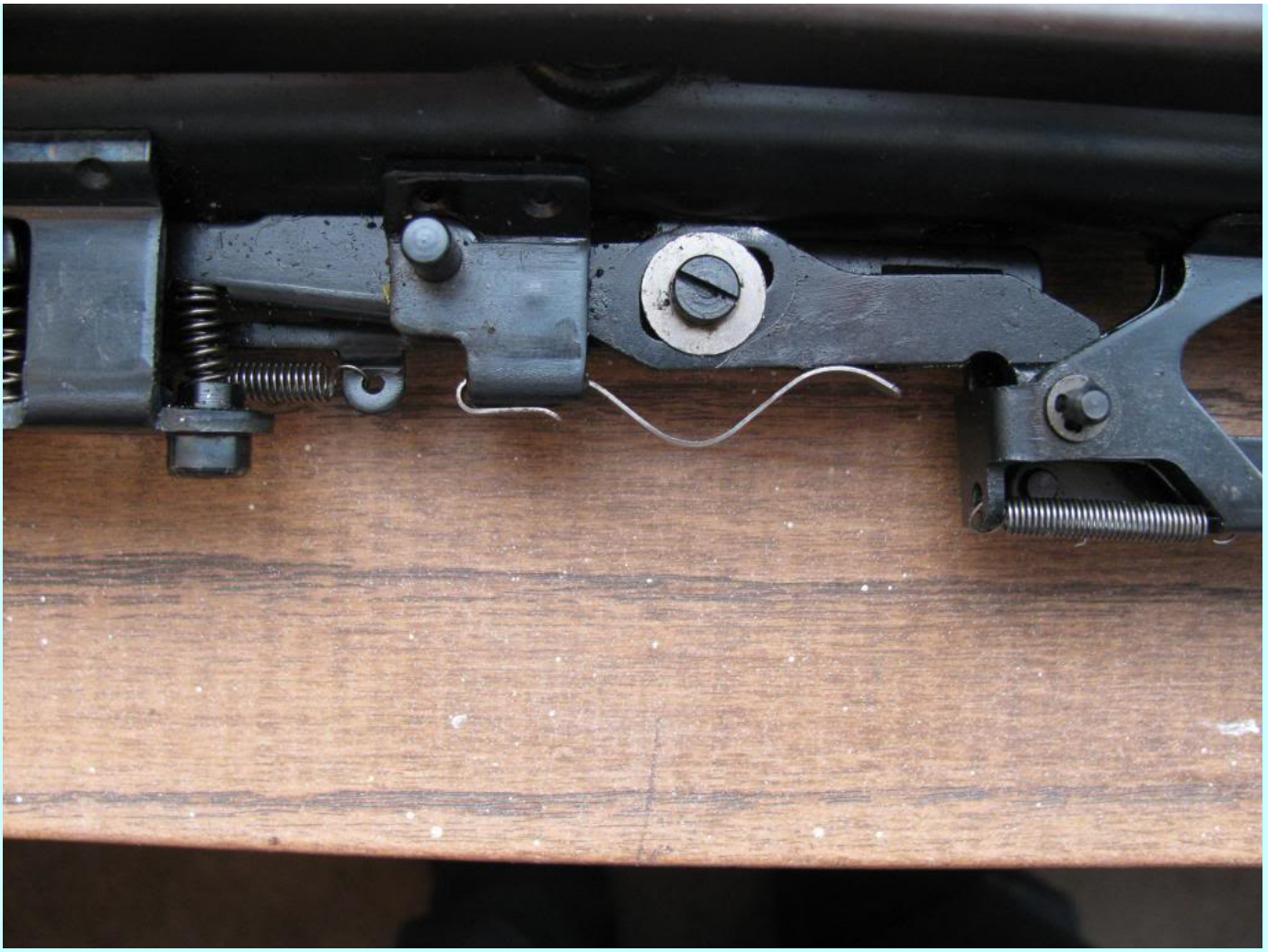
Thanks to Clark for the following close up pics of an assembled 75 trigger mechanism:






MADE IN WEST GERMANY





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This message has been edited by Garvin2 on Jan 14, 2013 6:01 AM