

INSTALLATION MANUAL

SPLITGEARBOX

UNIMOG 435

1. Tilt cab of UNIMOG, secure it safely!
2. Remove drive shaft from engine to gearbox
3. Get it shortended by a proffessional shop for driveshafts.
Shorten it by 157mm and balance it new.
Check joints and replace them if necessary
4. Remove Unimog clutch housing
5. Check clutch, if necessary.
Replace it, if necessary.
Reinstall it with a centralizing tool.
If not available get the tool done on a lathe.
6. Mount the SplitGearBox (SBG) with a crane.
Take care for the valves at the rear end of SBG.
Torque for screws M10: 49Nm
Use Loctite



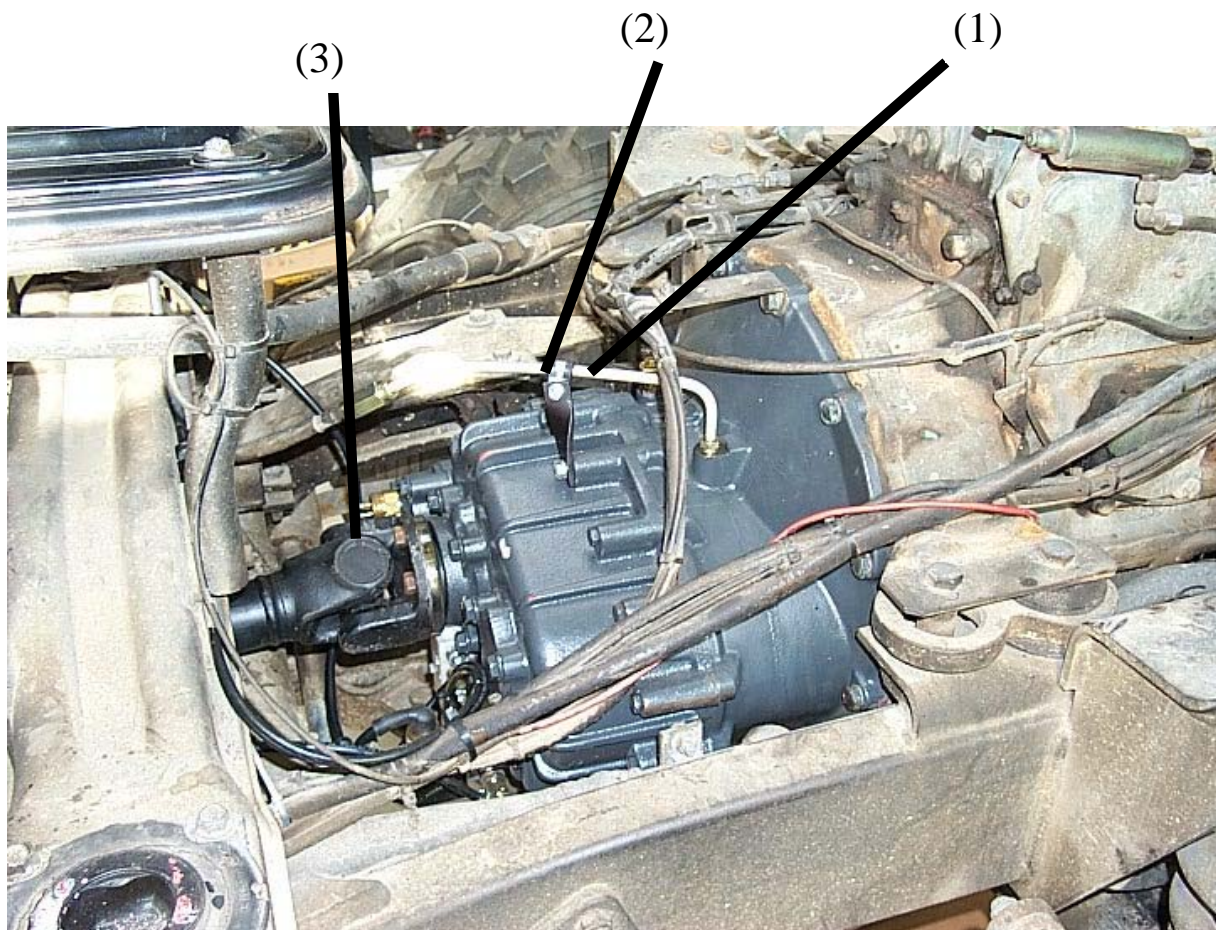
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7. Install clutch line (1), install bracket (2) for clutch line
8. Mount drive shaft (3), use Loctite



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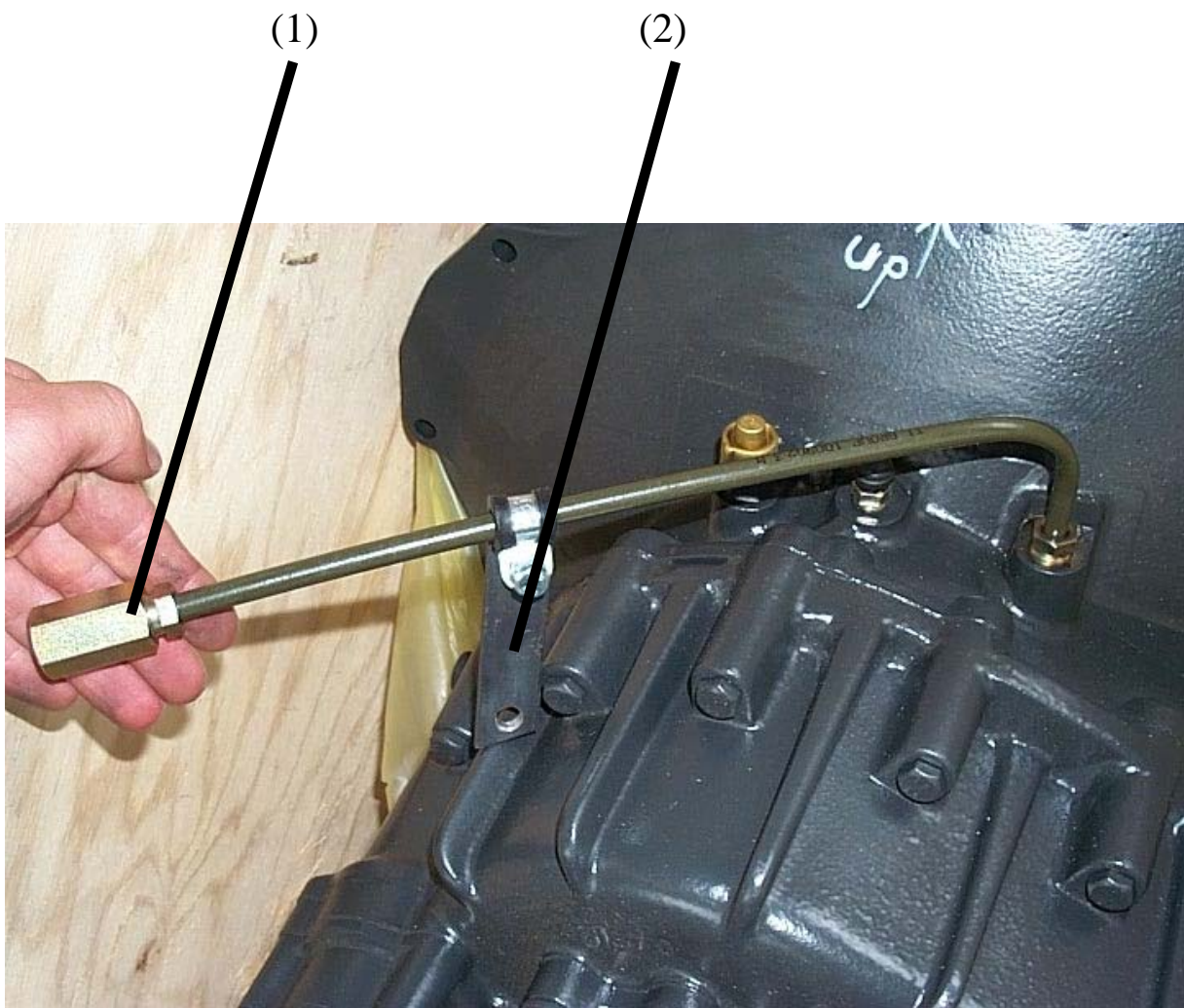
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9. Fitting (1) for clutch line and bracket (2)



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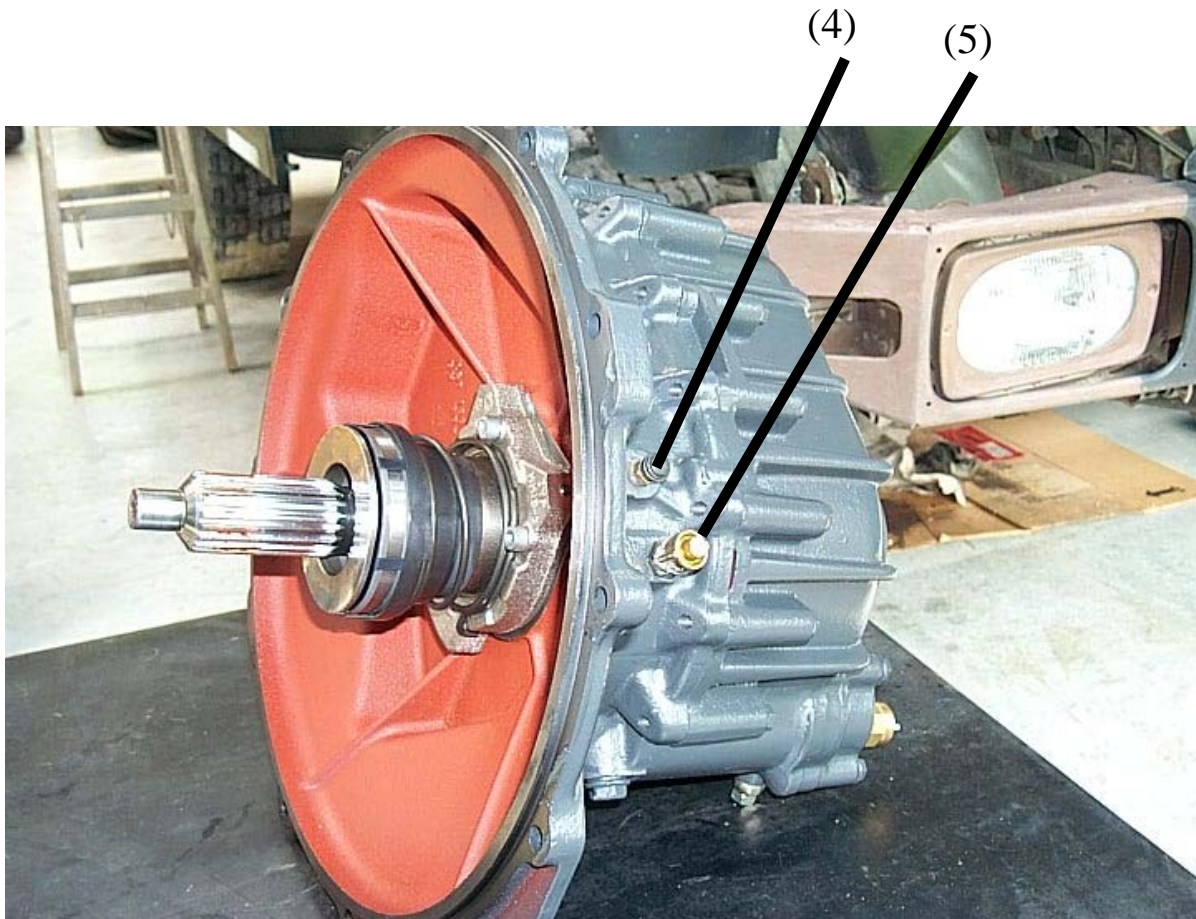
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10. Bleed clutch line like the standard clutch, use bleeder (4).
(5) is gearbox housing bleeder—no need to open it.
Fill clutch fluid reservoir frequently with brake fluid
during bleeding process.



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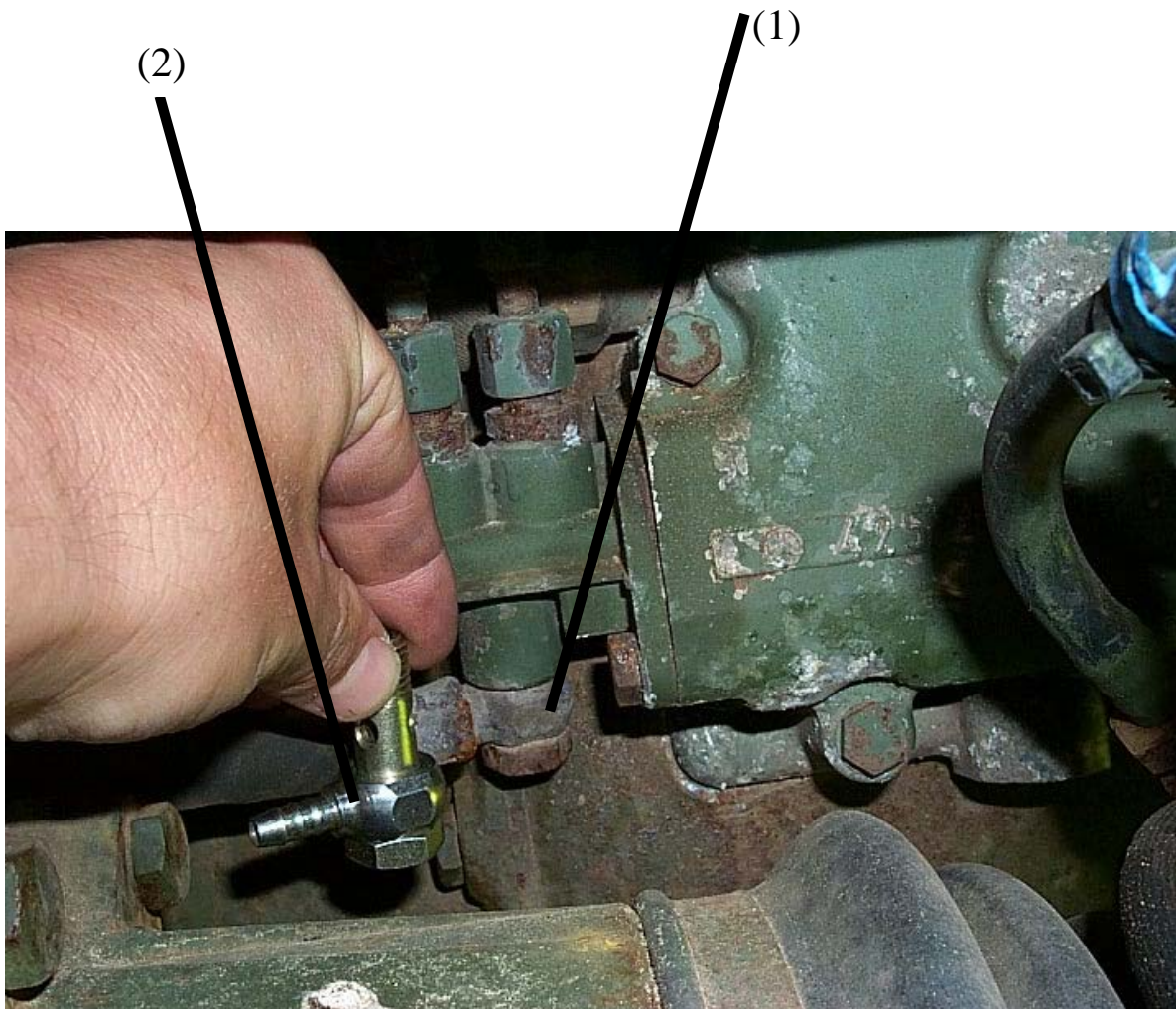
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11. Installation of pneumatic system:

Get your air supply from 8-speed gearbox shifting cylinder intake using the double hollow screw (1).

From there go with an 8mm plastic hose (8mm outside diameter) to the SGB. Push the matching fitting (2) inside the hose. It helps to fix the hose and hit in the fitting with a small hammer.



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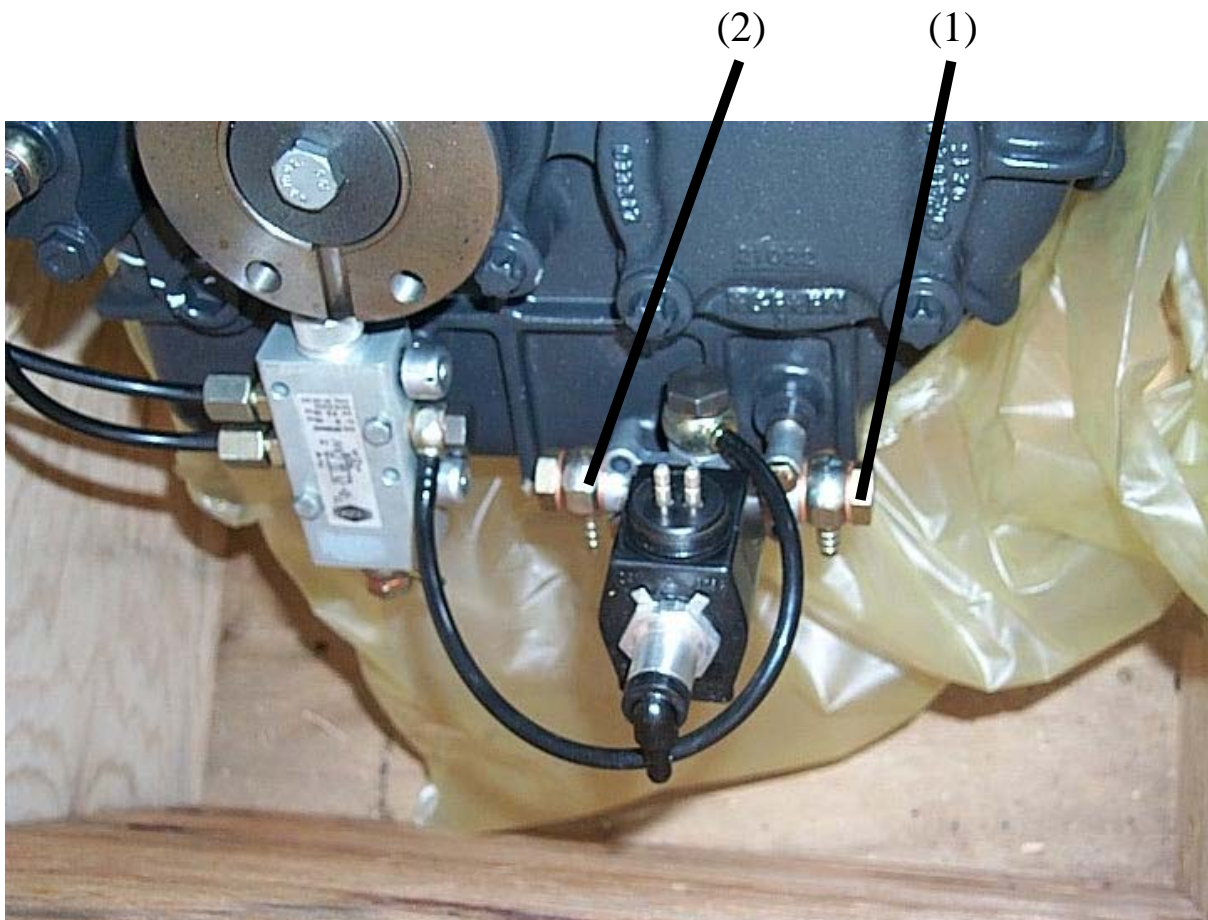
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12. Go with 8mm hose into (1).
Go from (2) with a 6mm plastic hose (using the matching smaller fitting) underneath the shifter plate.
13. Take a 6 to 4mm reducer and install it.
6 and 8 mm hoses need an inner bushing, when not used with a fitting like (1) or (2).
14. Dismount old, long shifter stick, mount new, short shifter stick.



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15. Go with 4mm hose to the shifter itself.

Drill a hole narrow to the shifter stick and use the gummi plug (drilled for three 4mm hoses) to prevent the 4mm hoses getting damage when going through.

Mount the shifter hose and then the shifter valve.

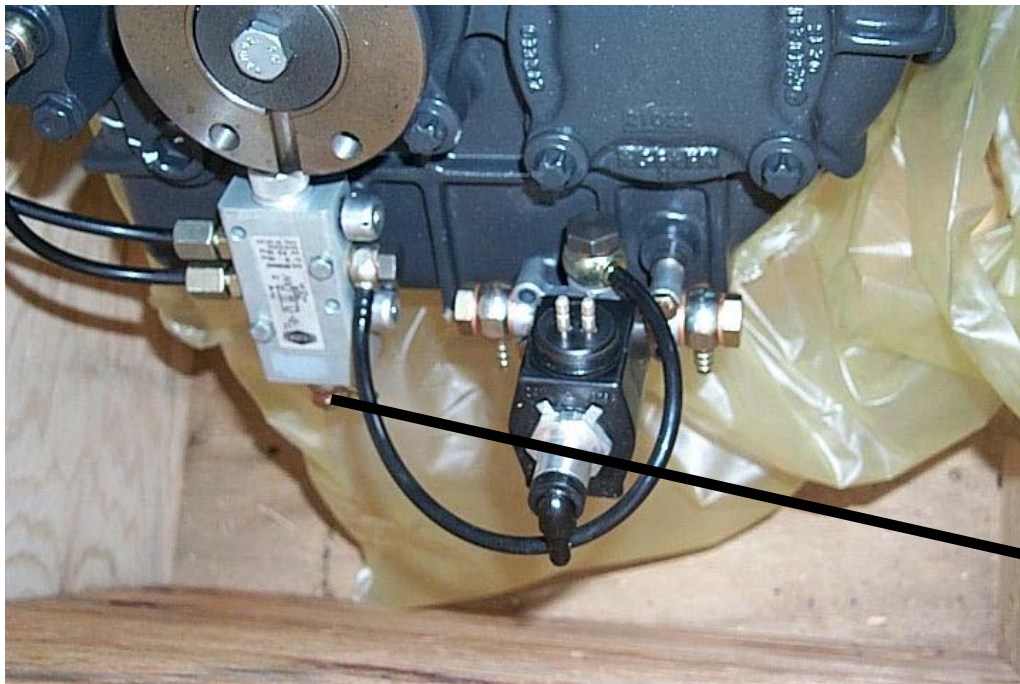
Go with the 4mm hose inside the hose to the intake of the valve (marked with „1“)

Go with another 4mm hose from the switch (no „2“) inside the shrink hose through the gummi plug (see page 8) underneath the shifter plate.

16. Take a reduction fitting and go from 4mm to 6mm hose.

17. Go with the 6mm hose into (1)

Go with a separate 4mm hose from shifter valve no „3“ underneath shifter plate. Let the bleeder hose end there.



(1)

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Shifter hose

Gummi plug



Shifter valve

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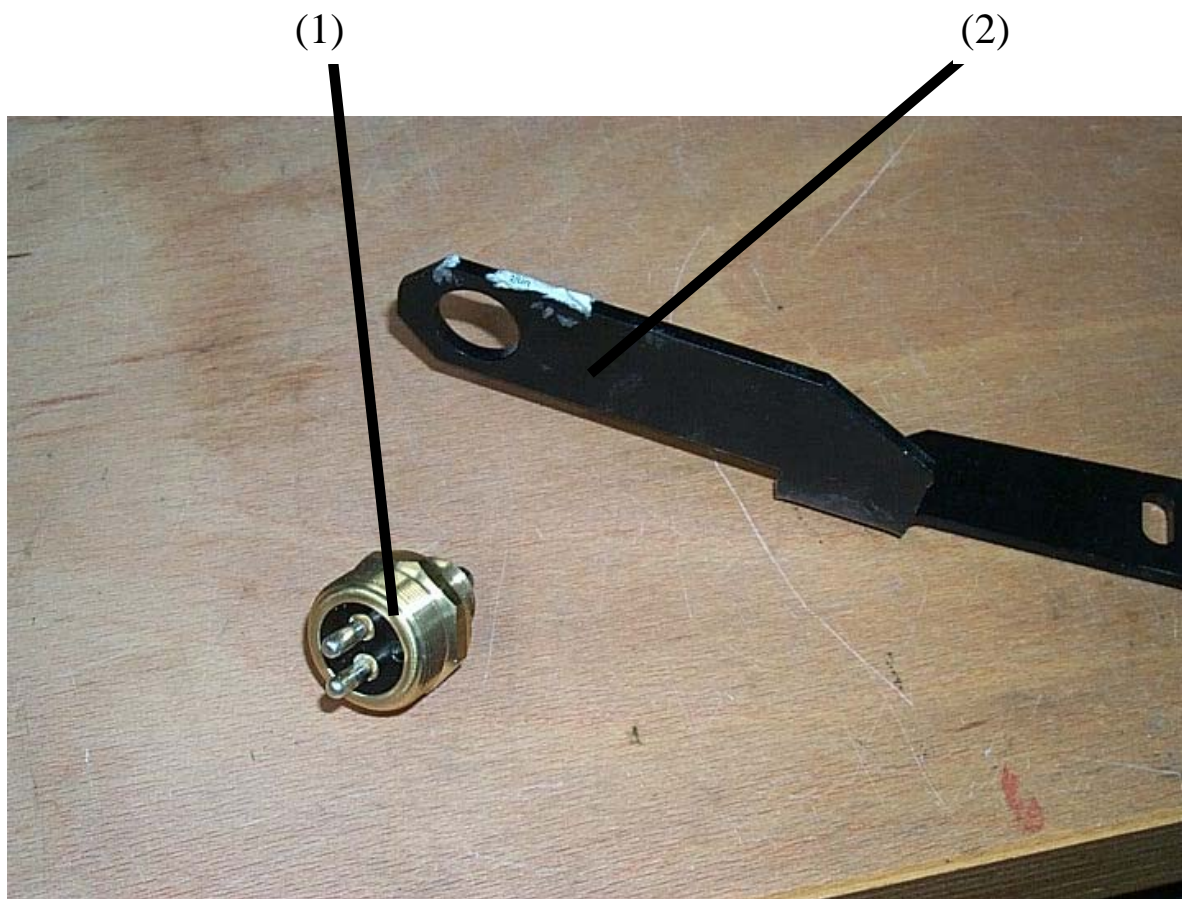
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18. Electric system: Take power supply inside the dashboard.
Use the fuse „out“ contact at fuse „heater“ (9th from left).
Must not have voltage when key in „off“ position.
Go with electric wiring to clutch pedal area.
Install clutch switch (1) with bracket (2) at clutch pedal.
19. Weld small metal piece to pedal arm, so the switch is engaged at the lowest pedal position.
20. Connect wiring to clutch switch and go on to SGB.
Attention: Go with wiring to the vehicles front and then go back along the frame. To go the shortest way would be negative for tilting the cab easily.
So go via the area of the cab tilting pivot point.



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Switch installed at clutch pedal:



Weld metal piece
Approx.
25 x 25 x 4
to pedal arm



Switch

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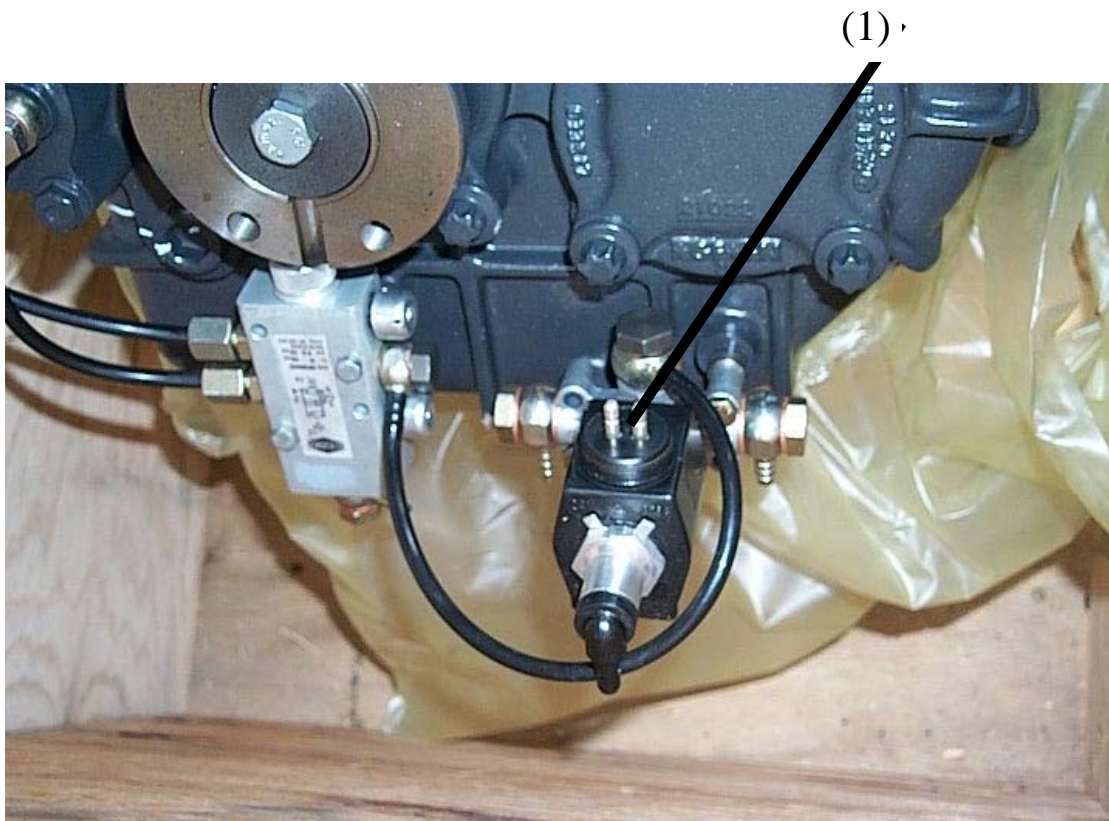
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21. Go with wiring to solenoid valve (1) at SGB.
Dont forget to get the other pin connected to ground.
Valve must get 24 Volt voltage, when pedal is pushed fully.
You should be able to hear that working.



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Control wiring: Go from your power supply to the control switch at SGB.

Connect it and go back with wiring via pivot point into cab and into dashboard.

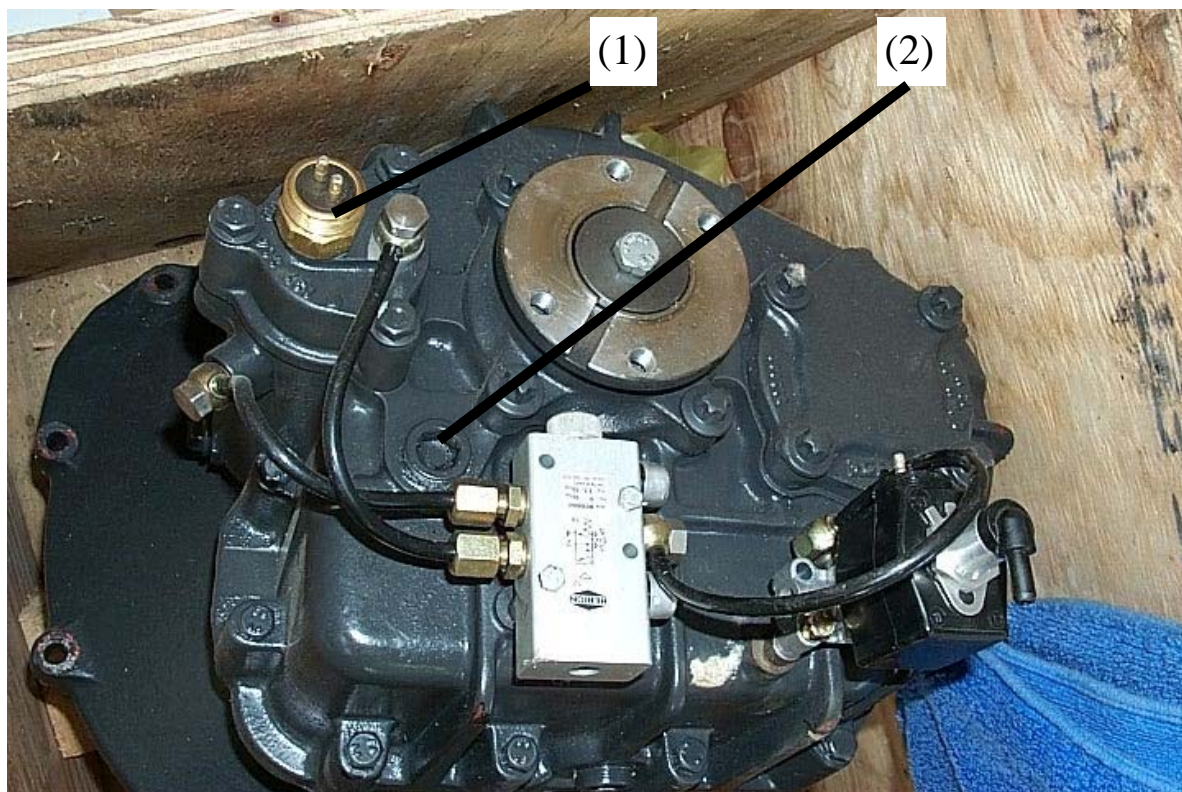
22. Install the control lamp and /or symbol with gears on into control lamp line. Connect lamp. Must show activity, when SGB is in high position. This means switch (1) is closed. Connect other pin of lamp to ground.

23. Fill gearbox with Synthetik Gearbox Oil 70-W90 up to level screw (2)

24. Release cab and fix it.....

25. Test shifting funktion, test for air leaks, test electric...

26. READY TO GO



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