11. WARRANTY

- The product will work faultlessly if used in accordance with operating instructions.
- Servicing and maintenance is ensured by the manufacturer.
- The manufacturer is committed to make good any deficiencies and breakdowns of the product - resulting from normal application of the product - within 45 days from the date the product has entered the repair shop. If it is not possible for the product to be repaired the manufacturer is committed to replace the faulty product with a faultless one.
- This warranty does not include mechanical damage, component parts which are subject to normal wear, e.g. packing elements, bactericidal filters and other filters and coupling pipes.
- This warranty is valid if it has been certified by the date of purchase and signed by the salesman.
- When bringing forward a claim please include the certified warranty.
- The manufacturer will cover the expenses contracted by transportation of faulty product within warranty period to the amount of valid bus, railroad or postal rates upon submission of receipts.
- If the repair shop of the manufacturer does not fix minor faults the warranty will be extended. In case the product has been replaced or a part of the product has been repaired the warranty starts for that particular part only.
- This warranty becomes void if repair work has been done by persons not authorized by the manufacturer.
- This warranty is valid for the period of one year from the date of purchase

Date of Production: _____

Date of Sale: _____

Manufacturer: _____

Sales Agent: _____

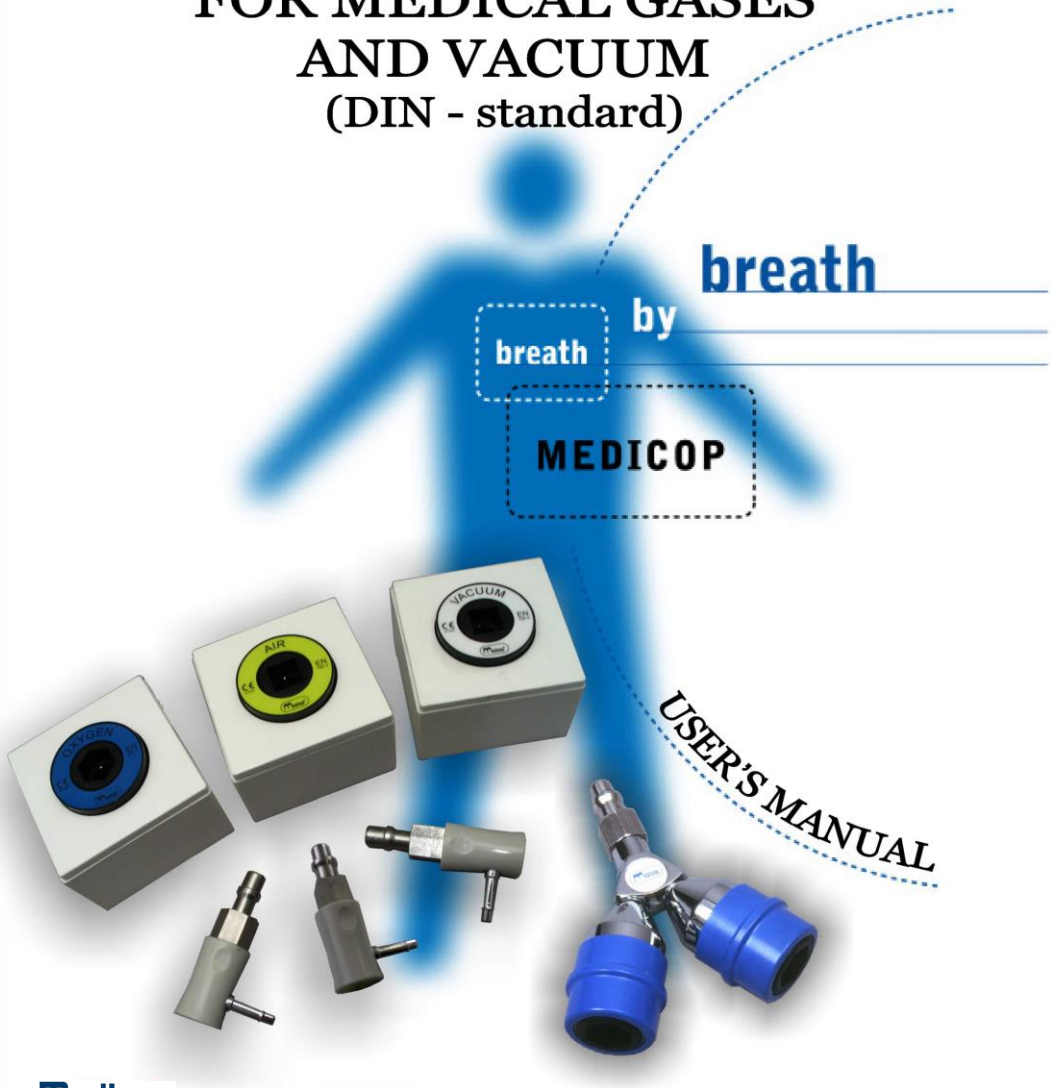
Serial Number: _____

Medicop®

CE 0123

TERMINAL UNITS FOR MEDICAL GASES AND VACUUM

(DIN - standard)



Medicop® / MEDICAL EQUIPMENT / MURSKA SOBOTA / SLOVENIA

Dear customer

Thank you for purchasing our product. We would, however, like to ask you to read the operating instructions very carefully prior to application of the product.

CE-marking:

CE 0123

The product has been manufactured and tested in accordance with the standards as follows: *DIN 13260-2, DIN EN 737-1* and *MDD 93/42/EEC (Annex I).*

The product meets the requirements as regards risk analysis for medical devices in accordance with standard *ISO 14971*.

Address of manufacturer

Medicop d.o.o.
Obrtna 43 (p.p. 161)
9000 Murska Sobota
Slovenia

tel:++386 (0)2 53 11 203
fax: ++386 (0)2 53 11 726

www.medicop.eu

-March 2006-

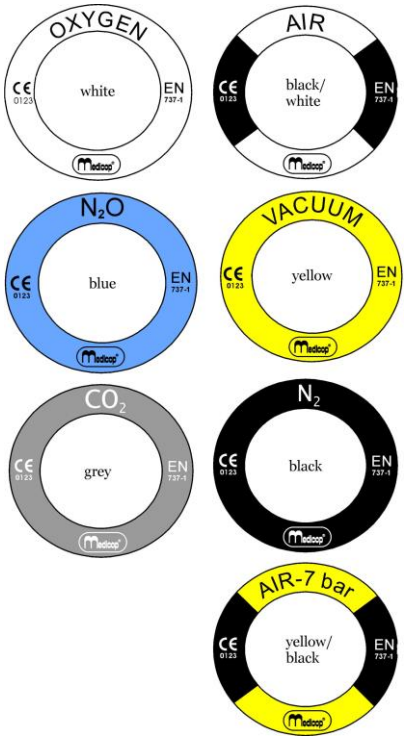
10. CONTROL SHEET

Name	***Terminal Units For Medical Gases - DIN***
Cat.N.	
Man.N	

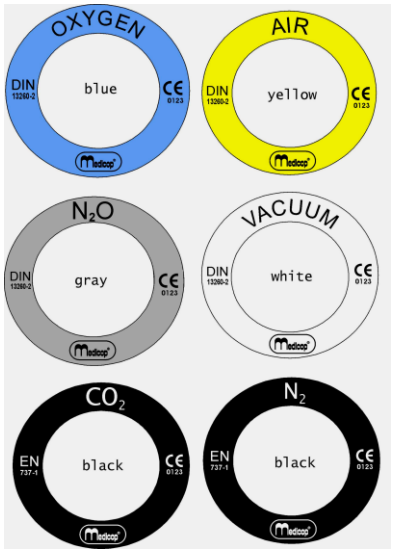
No..	Description of Repair	Date	Response

9. LABELS

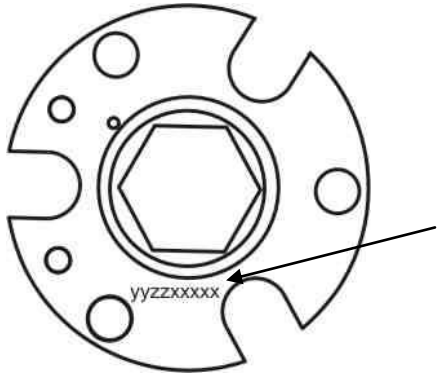
EN 737-1



DIN 13260-2



Serial number



The serial number is on the clutch casing
yy-year of production
zz-int. ident
xxxxx-number of the clutch

1. TECHNICAL DATA:

Terminal units are the points on a medical gas pipeline system where the operator makes connections and disconnections for the supply of specified medical gases to anesthetic machines, lung ventilators or other items of medical equipment, and where a wrong connection may create a hazard to the life of a patient. The "**terminal unit**" consists of "**outlet**" and "**connector**" while the outlet consists of "**clutch**" and "**socket**"

Single clutches with chromed casing can be used on the flexible hoses to enable the connection of connector to the hose.

Double clutches can be used either on the flexible hoses to enable two connections of connector to the hose or to divide a single outlet for medical gases to the two outlets.

Terminal units for oxygen-O_2, nitrous oxide-N_2O, air for breathing, carbon diokside-CO_2 and nitrogen-N_2:

Work pressure:	5 ± 0,5 bar
Max. Work pressure:	10 bar
Gas flow:	40 ± 3 l/min
Inlet connecting tube	Ø8mm

Terminal units for vacuum

Vacuum rate:	–0,6 bar
Free air flow:	depend on the vacuum pump
Inlet connecting tube	Ø8mm

Dimensions of surface mounted socket

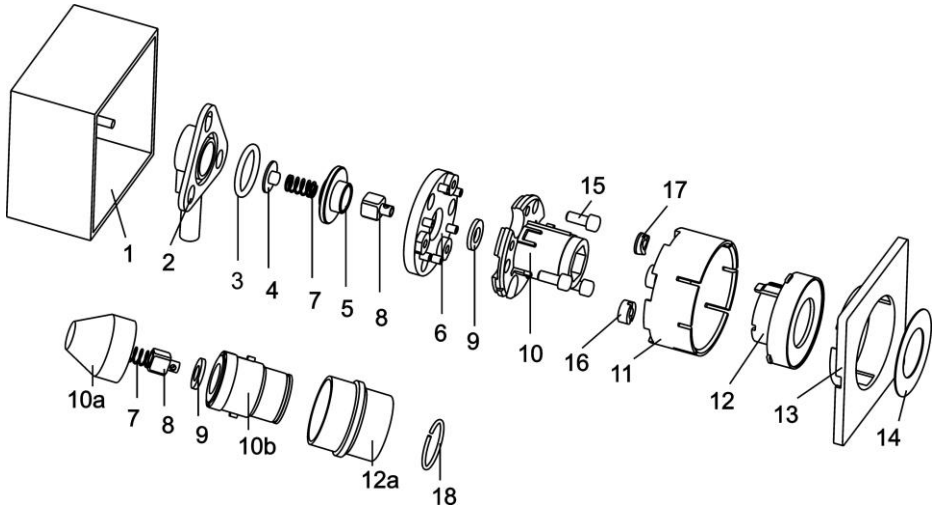
Length:	81 mm
Width:	81 mm
Depth:	60 mm
Inlet connecting tube	Ø8mm

Dimensions of sunken mounted socket

Diameter:	68 mm
Height:	95 mm
Depth (under wall):	52 mm
Depth (over wall):	12 mm
Inlet connecting tube	Ø8mm

2. LIST OF CONSTITUENT PARTS

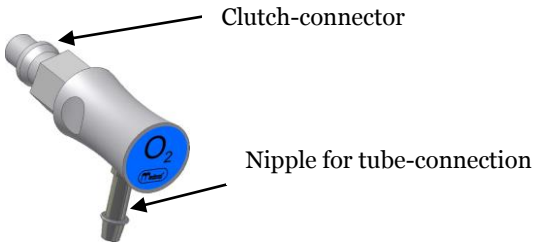
2.1 Outlet:



Title	Title
1. Casing of socket (surface or sunken mounted)*	10. Clutch casing
1a. Base plate	10a. Clutch casing 1-single cutch
2. Flange with copper pipe*	10b. Clutch casing 2-single cutch
3. Washer ϕ22,3x2,4	11. Coupling mantle*
4. Spring-guide	12. Releasing ring
5. Valve guide	12a. Releasing ring-single clutch
6. Base ring	13. Rosette cover*
	14. Labels for (air, O_2, vacuum, N2O, CO_2, or N_2)
7. Spring	15. Imbus screw M5 x 12 (DIN 912)
8. Valve	16. Nut M6
9. Plain washer ϕ16x8x2	17. Safety nut M6
	18. Safety ring

***These pieces are parts of the socket, the other parts are the "clutch"**

2.2 Connector:



5. TROBLESHOOTING:

You have pushed the connector into the outlet but the medical gas supply has not been established; make sure that:

- **the connector is pushed into the outlet correctly (all the way)**
- **there is gas in the tube system (check other outlets)**
- **try to set up gas flow with another connector**
- **check the condition of the outlet (make sure the outlet is vacant)**

Contact the manufacturer if the trouble is not lifted.

6. CLEANING

The terminal units shall be dry-cleaned.

7. MAINTENANCE

It is recommended to replace the washers of outlet each 5 years.
After replacement of washers the leakage – test shall be done again!
Only the trained person can replace the washers and perform the leakage – test!

8. WARNINGS:

- **Installation of the terminal unit shall be done by trained person only.**
- **When reaching into the outlet only a screwdriver must be used.**
- **Greasing of any clutch or connector component part is strictly prohibited.**
- **Make sure that a patient does not block the outlet with paper or chewing gum.**
- **Do not smoke nearby of terminal units.**

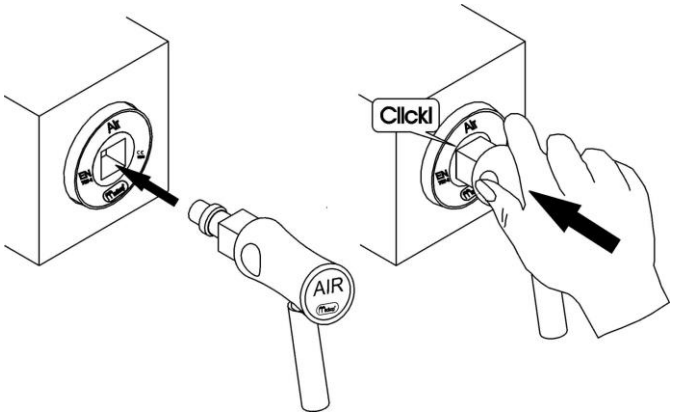
Terminal units for medical gases can be used in combination with the medical equipment as follows:

respirator, aspirator, oxygen flowmeter, breathing mask anesthetic equipment.

4. INSTRUCTIONS FOR USE:

Connections and disconnections of the connector is manual, operator doesn't need any tools by inserting and throw-out of the connector. As soon as the connector is correctly inserted into the outlet, flow of the gas is open. With disconnection of the connector gas-flow is interrupted.

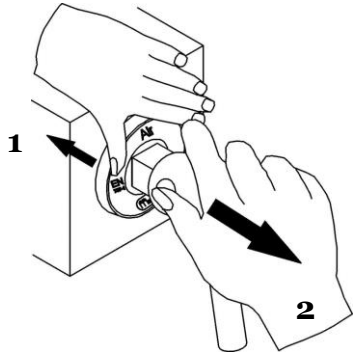
4.1 Setting up of gas flow



Hold the connector with your hand and push it into the outlet as indicated by an arrow until it stops and locks in the outlet; the required force is app. 50N; thus gas flow has been set up.

4.2 Interruption of gas-flow:

Push with one hand upon the releasing ring of the outlet (see arrow 1) and pull the connector from the outlet (see arrow 2); the required force is app. 50N; thus the gas flow has been interrupted.

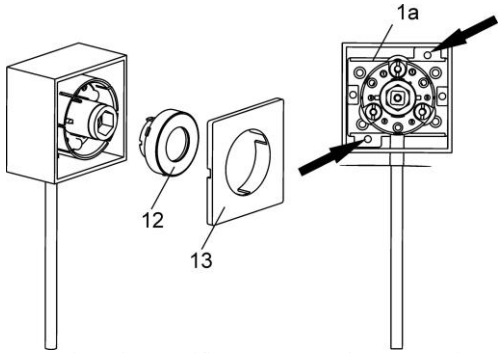


3. FITTING CLUTCH TO TUBE SYSTEM

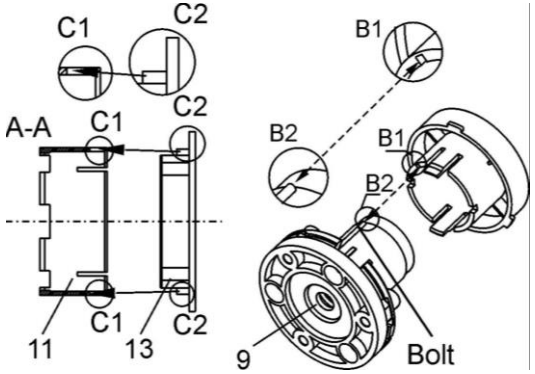
ATTENTION: Installation of the terminal unit shall be done by trained person only.

3.1 Fitting clutch into surface-mounted socket

In this case the clutch has already been fitted into the surface-mounted socket. The socket is fixed to the wall in that the rosette (socket cover) 13, releasing ring-12 are removed whereupon the socket is fixed with two screws - through base plate (1a) which is leaned against the wall. When the socket has been fixed to the wall, the copper pipe can be connected with the specific gas source.

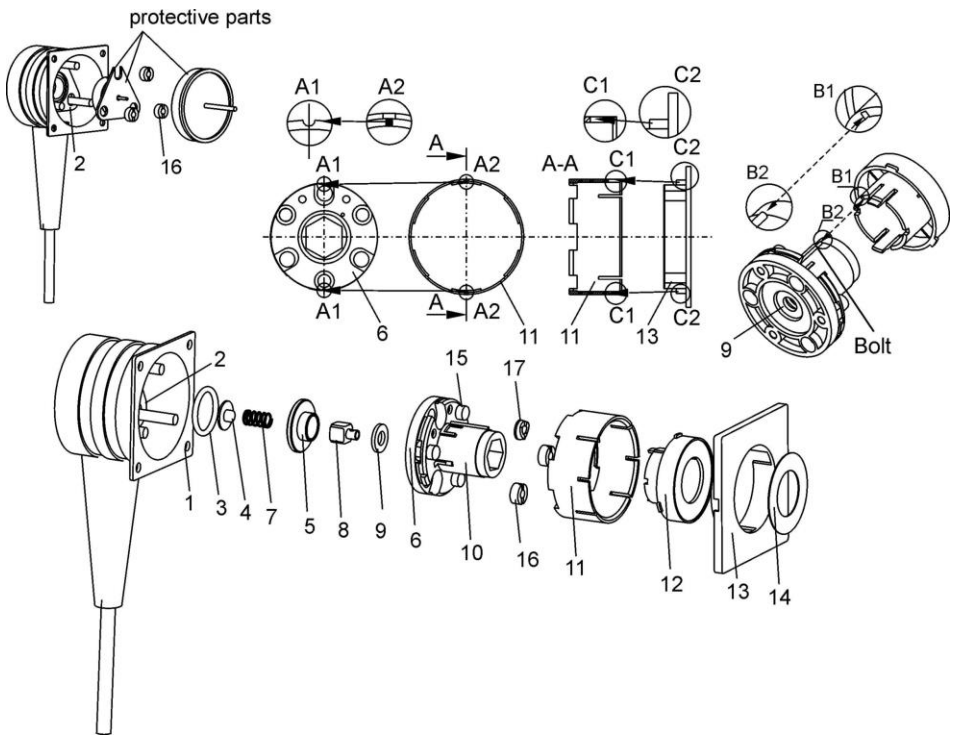


After the clutch is connected to the specific gas source the removed parts shall be assembled vice-versa.



Step 1: Put the coupling mantle (11) on the clutch casing (6). Be sure to connect nipples A_2 to the notches A_1 (see detail A).
Step 2: Insert the releasing ring (12) on the clutch casing (see detail B).
Step 3: Put on the rosette cover (13). Two nipples on the rosette must be inserted into the two notches on the coupling mantle (see detail C).
Single and double clutch
Single clutches with can be used on the flexible hoses to enable the connection of connector to the hose.
Double clutches can be used either on the flexible hoses to enable two connections of connector to the hose or to divide a single outlet for medical gases to the two outlets.
To disassemble the clutch the following procedure should be done:
1 – Remove the safety ring (18) from clutch casing (10b) with an appropriate tool
2 – Unscrew clutch casing (10b) of the clutch casing (10a). No tools are required.
3 – Remove plain washer (9) from it's place with a sharpen screwdriver
To assembly the clutch the reversible procedure should be done.

3.2 Fitting clutch into sunken-mounted socket



Step 1: Fix the socket (1) into the wall by cast or into the dry-mounted wall by the screws.

Step 2: Remove the parts which prevent inlet of dirtiness and cast into the socket if they are fitted

Step 3: Insert the washer (3) on the flange, insert the spring guide (4) into the flange and put on the valve guide (5). Trough the valve guide insert the spring (7) and put the valve (8) on the spring.

Step 4: Insert the plain washer (9) trough the base ring (6) into the washer-seat on the clutch casing (10) and put the assembled base ring and clutch casing trough the three coil corks on the flange and fix them by 3 nuts (16) **Note**: The safety nut (17) shall be fitted after the leakage test. For this procedure use an appropriate tool which is added to package.

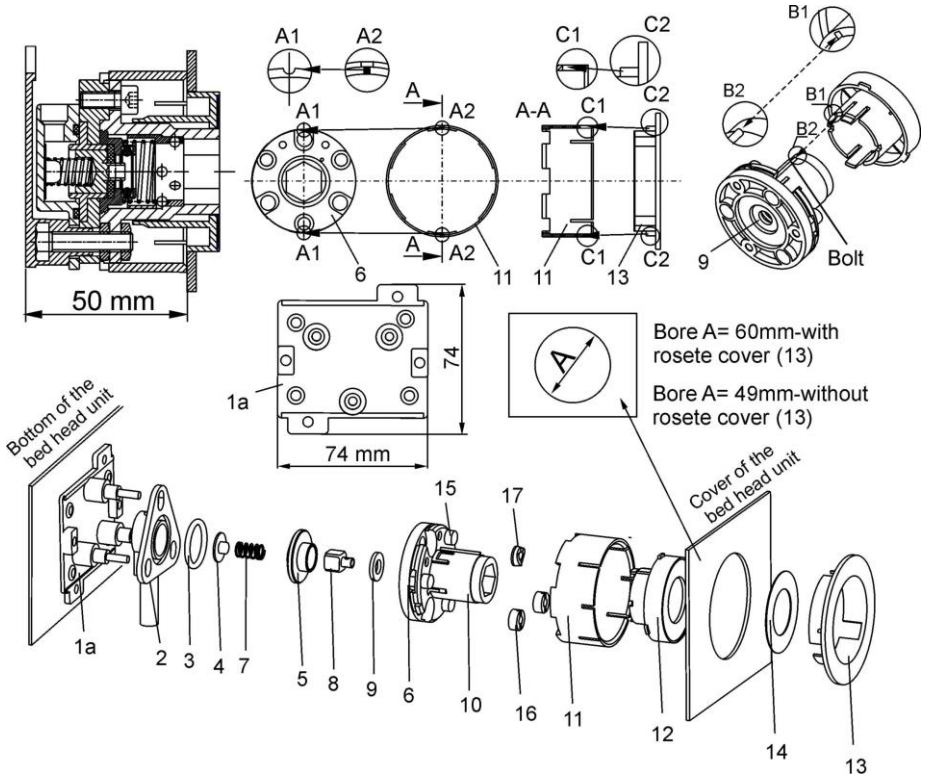
Step 5: Put the coupling mantle (11) on the clutch casing. Be sure to connect nipples A_2 to the notches A_1 (see detail A). (If the rosette cover won't be used, you may skip this step).

Step 6: Insert the releasing ring (12) on the clutch casing (see detail B).

Step 7: Put on the rosette cover (13). Two nipples on the rosette must be inserted into the two notches on the coupling mantle (see detail C).

Step 8: Put the label on the releasing ring.

3.3 Fitting clutch into the bed head or ceiling unit



Step 1: Screw the base plate (1a) into the bed head unit with four screws . The screws should be in accordance with costumers needs.

Step 2: Put a flange (2) on the base plate and connect the flange with the gas source, but the gas flow must be closed! You may connect the flange to the gas source also later.

Step 3: Insert the washer (3) on the flange, insert the spring guide (4) into the flange and put on the valve guide (5). Trough the valve guide insert the spring (7) and put the valve (8) on the spring.

Step 4: Insert the plain washer (9) trough the base ring (6) into the washer-seat on the clutch casing (10) and put the assembled base ring and clutch casing trough the three coil corks on the flange and fix them by 3 nuts (16) **Note**: The safety nut (17) shall be fitted after the leakage test. For this procedure use an appropriate tool which is added to package.

Step 5: Put the coupling mantle (11) on the clutch casing. Be sure to connect nipples A_2 to the notches A_1 (see detail A). (If the rosette cover won't be used, you may skip this step).

Step 6: Insert the releasing ring (12) on the clutch casing (see detail B).

Step 7: Put the label on the releasing ring and cover the bed head unit.

Step 8: Put on the rosette cover (13). Two nipples on the rosette must be insert into the two notches on the coupling mantle (see detail C). Make sure the flange is connected to the gas source! The outlet is ready for work.