INSTRUCTION FOR GENIUS MB REDUCER OVERHAULING

REDUCER DISASSEMBLY

- 1) Close Reducer in a clamp with Gas Cap (55) downwards-facing.
- 2) With a TH30 torque wrench unscrew the 6 screws of the Liquid Cap (3).
- 3) Remove OR (2).
- 4) With a CH7 hexagonal wrench the 2 screws of the Fork (25), remove the component.
- 5) Remove Gas Outlet Pipe-holder (23).
- 6) With a CH19 hexagonal wrench unscrew Gas Inlet Fitting (9)
- 7) Turn Reducer by closing it again in clamp with Gas Cap (55) upwards-
- 8) With a CH10 hexagonal wrench unscrew Pipe-holder (57).
- 9) With a TH30 torque wrench unscrew the 4 screws of the Gas Cap (55) following the order ADBE, then, keeping pressed the cap, totally unscrew CF screws.
- 10) Remove Gas Cap (55), Trimmer group ((52) (53)) and Spring (51) and make a 90° turn on the Pivot-Diaphragm group in order to unhook it from the Lever. Remove OR (50)
- 11) Remove Plastic Little Disk (49), then, with the CH7 hexagonal wrench, unscrew the 2 fixing screws of Lever Pivot (33), and take all out.
- 12) For replace Diaphragm and Safety Valve group, follow the instructions in the Safety Valve Overhauling Kit Cod. 02RR00504001.
- 13) Remove every OR on disassembled parts, and Lever Shutter.
- 14) Make a careful wash of every component not replaced (Body, Caps, Pipeholders, and so on).

REDUCER REASSEMBLY

- 1) Close Reducer in a clamp, for the dynamometric wrench applying a 2,5 Nm torque following the order ACBD; being careful to avoid cutting or scratching Water Gasket.
- 2) OR (24) on the Gas Outlet Pipe-holder (23) insert group in the suitable housing, so place Fork (25) and lock the 2 Screws (22) with a dynamometric wrench applying a 2,5 Nm.
- 3) Make a 180° turn on the reducer in the clamp.
 4) Fix the water elbows with the Fork (10), blocked in its turn from the Gas Inlet Pipefitting Group ((9) with OR (8)) locked with CH19 dynamometric wrench, applying a 20 Nm torque. Check elbows can be oriented.
- 5) Place Reducer with coil side upwards-facing.
- 6) Insert OR (2) in the suitable housing, so place Liquid Side Cap (3) verifying the right correspondence with body screws holes, so locking the 6 screws (4) with the TH30 dynamometric wrench applying a 9,5 Nm torque following the order ADBECF.
- 7) Remove reducer from the clamp and close it again with the side not still reassembled upwards-facing.
- 8) Insert OR (50) in the suitable housing on the reducer body, so reassemble Lever group ((31), (32) and new Shutter (30)) with Pivot (33) fixing everything with the 2 screws (22) locked with the CH7 dynamometric wrench applying a 2,5 Nm torque.
- 9) For reassemble Pivot-Diaphragm group, you can use the old pivot group, or the new one contained in the suitable Overhauling Kit. Close the flat low side of the pivot in clamp, so insert new Diaphragm (45) being careful to place diaphragm tongue at 90° compared with the pivot flat side closed in the clamp. Assemble Flat (46), and Bauer Washer (47) with the low side upwards-facing, and then lock all with Nut (48) closed with a 2,5 Nm torque with CH14 dynamometric wrench.
- 10) Little Disk Assembly (49) with ø 3 hole placed on Lever group. Assemble Pivot-Diaphragm group with diaphragm tongue placed at 90° compared with the lever axis, then, keeping lever raised, hook pivot and make a 90° turn on the diaphragm, placing tongue in the suitable housing on the body. After doing it, make a 180° turn on the plastic little disk placing the ø 3 hole near gas outlet.
- 11) Positioning of the Spring (51) on the Flat of Pivot-Diaphragm group. Trimmer group assembly ((52) (53) (54)) on the spring.

 12) Assembly of Gas Cap group ((55) (57) (58)) closing Pipe-holder (57) with
- CH10 dynamometric wrench applying a 1,5 Nm torque.
- 13) Placing of Gas Cap group, checking the right correspondence with body screws holes, so, by pushing on the cap, lock the 2 CF screws (4) with TH30 dynamometric wrench applying a 9,5 Nm torque, then close the last 4 screws following the order ADBE.
- 14) Assembly of overhauled reducer on the vehicle, idle adjustment, then insertion of Inset-Cover (56). Check absence of gas or water leakages.

















