



HS45 A gearbox

Pressure hose on the transmission

Support bracket for shift cable

Supports for brake callipers (fixed and moving parts)

1

Tube connecting the Hs45 gearbox to the brake cylinder

Master brake cylinder

Tube connecting the brake cylinder to the brake callipers

Brake callipers

Propeller shaft 40mm diameter equipped with brake disk

Detach the shift cable from its bracket on the engine.



Affix it to the ZF transmission using two M12 screws (no American screws) + spring washers
Torque = 3.5DaNm

2

Shift cable support

Install the L-bracket for the brake callipers on the gearbox by bolting it onto the shift cable support.



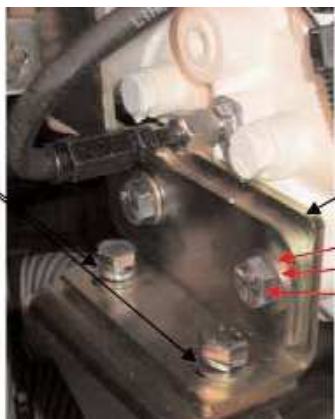
Affix the brake calliper using two M8 screws (included)
Torque = 2DaNm

3

Install the calliper support on the moving bracket.



Tighten the screws only after verifying that the position of the brake callipers is correctly aligned on the brake disk. Torque = 2DaNm



4

Bracket for shift cable

Washer 789300

Washer 791700

Screw 934750

- Install the moving brake calliper mount on the fixed L-bracket.

Adjustment possible using the oblong boltholes

To verify proper alignment of the callipers, give the disk a full turn to make sure it does not make contact with the callipers.



5

The disk should not enter into contact with the brake pads.

- Attention: be sure to check for proper alignment of the callipers on the brake disk of the propeller shaft.

Washer 791800

Washer 031417

Screw 961913

Installation of brake cylinder bracket by 2 screws M12x30
Torque = 6DaNm

- Assemble the bracket for the master brake cylinder on the gearbox.
- Fit the brake cylinder on the bracket.



6

7



Tighten the brake cylinder on the support bracket using 2 M8 screws (included).
Torque = 2 DaNm

- Install the brake cylinder by tightening the bolts on the support bracket.

8



Unscrew the cap on the brake cylinder.

- Open the fill cap on the brake cylinder.

9



10

- Place a funnel in the fill hole for the brake cylinder.

Place a funnel in the fill hole for the brake cylinder.

Hydraulic fluid = 068779 DEXTRON FLUID II D 60 L.

- Pre-fill the brake cylinder with hydraulic fluid.

11





Hose (included) connection to the gearbox
Fitting requires an Allen wrench



Connect the hose to the forward end of the brake cylinder.



12 Connect the supply hose to the brake cylinder

Hose (included) connection to the aft end of the brake cylinder



13 Connect the hose from the brake calliper assembly to the brake cylinder.

Hose (included) connection to the brake calliper assembly



Relief valve

Hose connection from the brake cylinder

14 Connect the hose from the brake calliper assembly to the brake cylinder.

Put the lever arm in the designated fitting in order to move the piston in the cylinder.

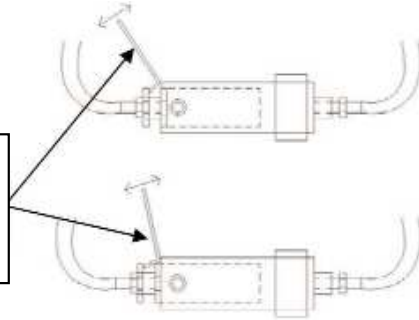


15 Fully cycle the brake cylinder a couple of times using the lever arm (with relief valve closed).

Cycle the cylinder with the relief valve closed until it becomes difficult to move. Open the relief valve to let trapped air bubbles escape. Close the relief valve. Repeat this procedure until only hydraulic fluid comes out.



With the piston fully extended, the fill hole for the hydraulic system to the brake callipers is exposed. Full movement of the piston is approximately 2 mm.



16

Location of the relief valve on the brake calliper assembly

Open the relief valve to let trapped air bubbles escape.



17

Close the relief valve.

18

Repeat this procedure until you observe 2 mm of movement from the piston on the brake cylinder.



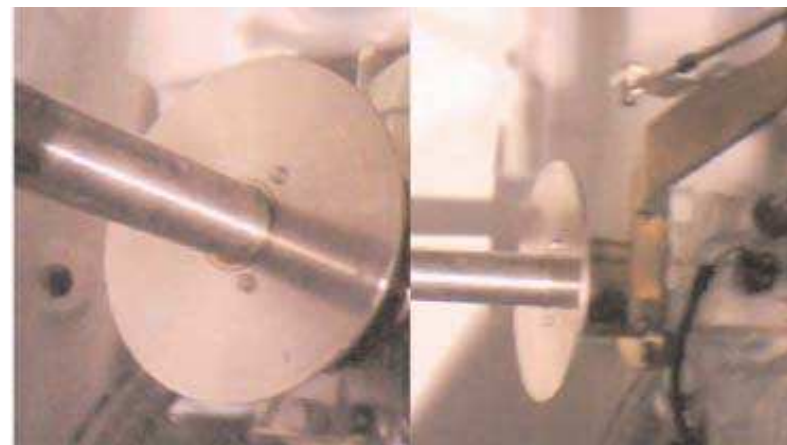
Screw the fill cap in place again.

- 19 Screw the fill cap onto the brake cylinder.
- 20 Verify that the propeller shaft is held securely by the brake.
- 21 Start the engine.
- 22 Verify that the propeller shaft turns freely, without interference, for a full turn.
- 23 Rev the engine to 1500 rpm.
- 24 Stop the engine and verify that the shaft is completely stopped by the brake, and that it is held securely in place.

Brake Kit 120265



- Brake calliper assembly
- Support bracket for fixed calliper (installed on gearbox)
- Support bracket for moving calliper
- Master brake cylinder
- Fixed support bracket for brake cylinder
- Moving support bracket for brake cylinder
- Hydraulic hose with connections to the engine gearbox and brake cylinder
- Hydraulic hose with connections to the brake cylinder and brake calliper assembly
- Hardware for assembly of calliper supports (2 screws M10 934750 + 2 Grower washers 789300 + 2 spring washers 791700)
- Hardware for the assembly of the brake cylinder supports (2 screws M12 961913 + 2 Grower washers 031417 + 2 spring washers 791800)



Brake pad + screw + connection to gearbox

133353 + 133354 + 133355*3 + 133356 + 133357