1	HERZ-Changing Tool Changefix	Operating manual for 7780
HERZ-	Changing Tool for HERZ-TS-90 Thermostatic Valve Upper Parts	Edition 0202
Function:		
Thanks to its	efix is a water-tight device that can be mounted on to the valve. liquid lock function, this tool allows the valve upper part to be changed e seat seal at the spindle while the system is under pressure.	
Field of app	lication:	Page 2
	, HERZ-TS-90-E, HERZ-TS-90-V, HERZ-TS-90-kv:	
•	dimensions 3/8" - 3/4"	
HERZ-TS-kv	, HERZ-TS-DIN, old version, all models	
	g of valves: External thread for installation of thermostatic head is fo-	
	uter body, valve upper part is screwed into valve.	
	oly of valve upper part for inspection and cleaning ad/or renewing of valve upper part	
_	n to model HERZ-TS-90/ -V/ -kv	
HERZ-DR-T-	90: All models, dimensions 3/8" - 3/4"	Page 3
Disassemb	, and the second	
Change of	spindle seal	
◆ Change and/or renewing of valve upper part		
Modification	n to model HERZ-TS-90/ -V/ -kv	
Measuring o	of differential pressure	Page 4
The application		
	angefix + pressure measuring accessories + differential measuring device	
enables measurement of differential or static pressure of the closed valve.		
Article numl	pers:	
1 7780 00	HERZ-Changefix, Changing tool	
1 7780 04	Set of seals	
1 7781 00	Pressure measuring accessories	
1 8903 00	HERZ-Measuring computer "Flow Plus"	
		Manager of the state to the second

We reserve the right to make modifications necessitated by technical progress.



Operating Manual HERZ-TS-90, HERZ-TS-90-E, HERZ-TS

- 1. Remove thermostatic head, hand wheel or screw cap.
- **2.** Loosen upper part with 18 mm square key, anticlockwise.
- **3.** Unscrew HERZ-Changefix coupling piece (6) and lock (4).
- **4.** Fingertight fasten union nut (7) and seal (2).
- **5.** Close draining valve (3).
- **6.** Open ball valve (5) by means of handle (8).
- **7.** Push control spindle (1) towards valve until nut is catching.
- **8.** Screw out upper part, anticlockwise.
- 9. Slowly draw-off control spindle (1) from valve until stop.

 The rubber ring holds the upper part in the nut and transports the upper part to the lock (4).
- **10.** Close ball valve (5).
- **11.** Open draining valve (3) placed above collecting wessel and drain lock (4).
- **12.** Unscrew seal (2), anticlockwise, and pull actuating rod (1) from lock (including upper part).
- **13.** Pull thermostatic upper part from nut, clean and/or change it.
- **14.** Put in cleaned or new thermostatic upper part.
- **15.** Put in control spindle (1) with upper part in lock and fingertight fasten seal (2), clockwise.
- **16.** Close draining valve (3) and open ball valve (5).
- **17.** Slowly put in control spindle (1) towards valve until stop.
- **18.** Screw in thermostatic upper part in valve, clockwise
- **19.** Open draining valve (3) placed above basin and drain lock (4).
- **20.** Unscrew coupling piece (6) and lock (4) from valve.
- **21.** Fasten thermostatic upper part with 18 mm square key, maximum taper 20 Nm.
- 22. Install thermostatic head, hand wheel or screw cap.

HERZ-Changing Tool Changefix Technical manual



Attention: All O-rings must be damage-free. Only then, water-tight operation and safety can be guaranteed!

Operating Manual

HERZ-DR-T-90

Change of O-Ring	Disassembly of HERZ-DR-T-90 Valve Upper Part	Change to Thermostatic Operation			
Close valve spindle until stop, clockwise	Open valve spindle until stop, anticlockwise				
Unscrew hand wheel disk, draw-off hand wheel					
Loosen O-ring screw with 18 mm square key, anticlockwise	Loosen upper part with 18 n	nm square key, anticlockwise			
Unscrew HERZ-Changefix coupling piece 6 and lock 4					
Fingertight fasten union nut 7 and seal 2					
Close draining valve 3					
Open ball valve (5)					
Push control spindle 1 towards valve until hexagonal nut locks					
in O-ring nut		upper part			
L	Inscrew O-ring nut and/or upper part, anticlockwi	se			
Slowly draw-off control spindle 1 from valve until stop. The rubber ring holds the upper part in the nut and transports the upper part to the lock 4					
Close ball valve (5)					
Open draining valve 3 placed above collecting wessel and drain lock 4					
Unscrew seal 2, anticlockwise, and draw-off actuating rod 1 and upper part from lock					
Replace O-ring by new one	Clean valve upper part or replace it by new one	Replace valve upper part by thermostatic upper part			
Put in control spind	Put in control spindle 1 and upper part in lock and fingertight fasten seal 2, clockwise				
	Close draining valve 3 and open ball valve 5				
Slo	Slowly put in control spindle 1 towards valve until stop				
Screw in O-ring nut, clockwise	Screw in valve upper part, clockwise	Screw in thermostatic upper part, clockwise			
Open draining valve ③ placed above collecting wessel and drain lock ④					
Unscrew coupling piece 6 and lock 4 from valve					
Fasten O-ring screw with 18 mm square key, maximum taper 15 Nm	Fasten valve upper part with 18 mm square key, maximum taper 15 Nm	Fasten thermostatic upper part with 18 mm square key, maximum taper 20 Nm			
Installation of hand whe	eel and hand wheel disk	Installation of thermostatic head			

HERZ-Changing Tool Changefix	Operating manual for 7781
Pressure Measuring Accessories	Edition 0202
Function:	
The HERZ-pressure measuring accessories enable measuring of differential or static pressure of the closed valve. The measuring is done with HERZ-Changefix Changing tool and HERZ-measuring computer Flow Plus 8903.	
Field of application:	
HERZ-TS-90, HERZ-TS-90-E, HERZ-TS-90-V, HERZ-TS-90-kv HERZ-DR-T-90	
HERZ-TS-DIN, old model	
HERZ-TS-kv, old model	
Parts:	
The accessories set contains a measuring spindle with universal seat piece and measuring valve locking piece.	
Measuring process:	
In order to measure the pressure a measuring spindle including seat piece and measuring valve is needed. After disassembly of upper part, the measuring spindle is screwed in valve (through lock). The measuring piece at the end of the rod measures in front of the valve seat, the draining valve at the lock measures behind the valve seat. Thanks to this procedure, the differential pressure of the closed valve can be measured. The measuring pieces can also be used to measure static pressure.	
For the connection and measuring process please see operating manual of the HERZ-measuring computer.	
After finishing the measuring process, unscrew the spindle, pull it back, close ball valve and drain the lock. After opening of seal, the valve upper part can be re-installed.	
For assembly and disassembly of the corresponding valve upper part, please refer to the operating manual of HERZ-Changefix.	