Hydraulic puller kit TMHC 110E



Application

The TMHC 110E is a combination kit consisting both of a jaw puller and a strong back puller. The jaw puller can grip components with an outside diameter of up to 160 mm (6.3 in). The strong back puller, which grips behind components where jaws cannot enter, can handle components with a maximum shaft diameter of 100 mm (4 in). Maximum pulling force for both pullers are equivalent to 100 kN (11.2 US ton force)

Description

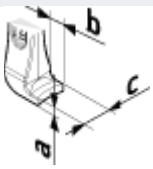
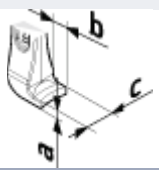
This puller kit consists of an advanced hydraulic spindle with an arm stand and two sets of arms. It has a self-locking arm system, which centres the arms and makes sure that the harder you pull, the harder the arm grips around the bearing. The arm-assembly stand has 4 arm-attachment points, which allows the puller to be assembled as a three-armed puller or two-armed one.

The strong back puller can, due to its wedge-shaped separators, enter behind components where jaw puller cannot enter. It further offers possibilities to engage the inner ring of a bearing thus making sure that no withdrawal force is transmitted through the rolling elements thus minimising the risk for damaging the bearing during dismounting and reducing force required to dismount.

The hydraulic spindle can be used in both pullers. It generates a maximum force of 100 kN (11.2 US ton force) and has a maximum stroke of 80 mm (3.1 in). The required forces are effortlessly generated using a built-in hydraulic pump. Two extension pieces and a nosepiece allow easy and quick adaptation to the shaft's length. The spindle is equipped with a safety valve, which prevents puller overload by limiting the applied force to 100 kN.



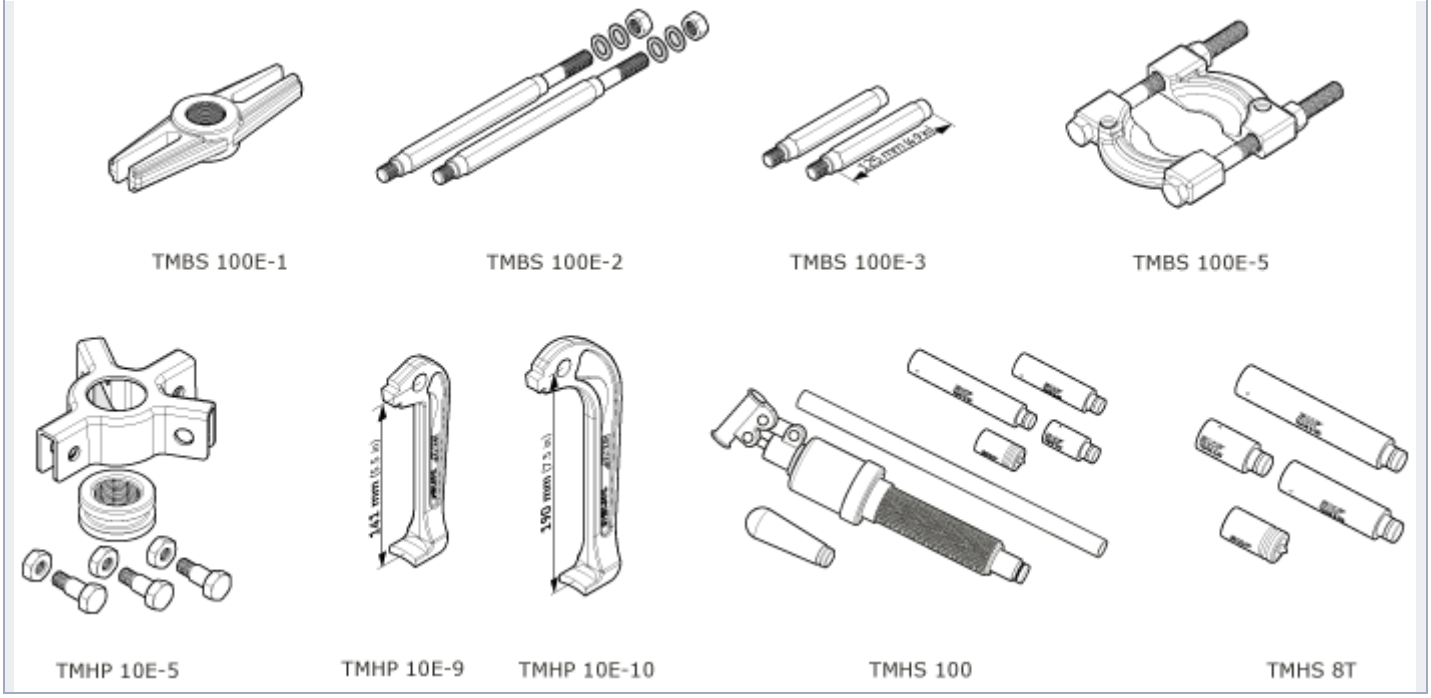
Technical data

Designation	TMHC 110E
Description	Advanced hydraulic puller kit
Overall data	
Contents	1 x arm-assembly stand 3 x arms, 70 mm (2.7 in) 3 x arms, 120 mm (4.7 in) 1 x separator set 1 x beam 2 x main rods 2 x extension rods, 125 mm (4.9 in) 1 x hydraulic spindle TMHS 100 2 x extension pieces for hydraulic spindle; 50, 100 mm (2.0, 3.9 in) 1 x nosepiece with centre point for hydraulic spindle
Maximum stroke	80 mm (3.1 in)
Nominal working force	100 kN (11.2 US ton force)
Weight	13,5 kg (29.8 lb)
Cycle life hydraulic cylinder	Minimum 5000 cycles up to 100 kN (11.2 US ton force)
Threading hydraulic cylinder	UN 1½" x 16 tpi
Safety valve setting hydraulic cylinder	105 kN (11.8 US ton force)
Carrying case dimensions	580 x 410 x 70 mm (23 x 16 x 2.8 in)
Jaw puller:	
Effective arms length, arms set 1 (TMHP 10E-9)	70 mm (2.7 in)
Width of grip, arms set 1	50-110 mm (2-4.3 in)
Claw dimensions	a = 5 mm (0.2 in) b = 15 mm (0.6 in) c = 25 mm (1 in) 
Effective arms length, arms set 2 (TMHP 10E-10)	120 mm (4.7 in)
Width of grip, arms set 2	75-170 mm (3.0-6.7 in)
Claw dimensions	a = 6 mm (0.2 in) b = 15 mm (0.6 in) c = 25 mm (1 in) 

Strong back puller:	
Maximum reach	255 mm (10 in)
Shaft diameter range	20 - 100 mm (0.8 - 4 in)

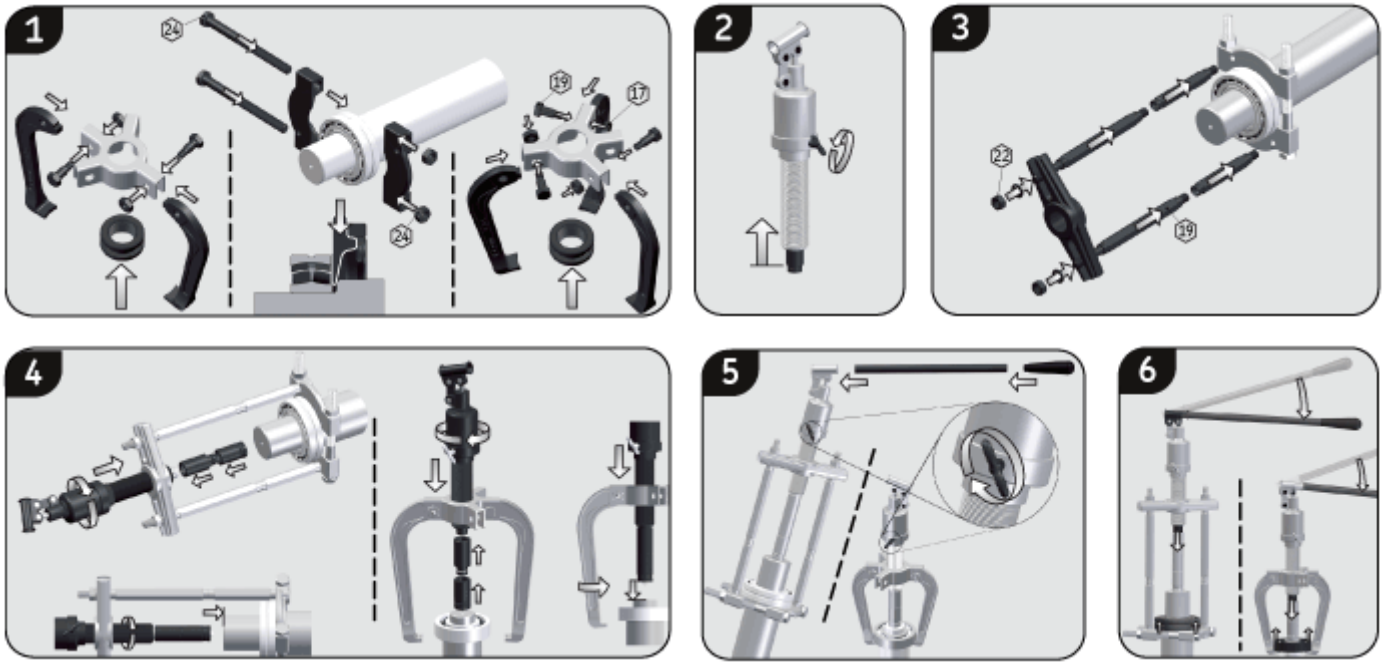
Part identification

Designation	Description
TMHP 10E-5	Arm-assembly stand, centre, bolts and nuts
TMHP 10E-9	100 mm (4 in) arm
TMHP 10E-10	150 mm (6 in) arm
TMBS 100E-1	Beam
TMBS 100E-2	Main rods, washers and nuts
TMBS 100E-3	2 x Extension rods 125 mm (4.9 in)
TMBS 100E-5	Separator set, bolts and nuts (100 mm / 4 in)
TMHS 100	Advanced hydraulic spindle, 100 kN
TMHS 8T	Set of extension pieces for the hydraulic spindle and a nose piece



Operating instructions

1a.	Select the appropriate arms for your application. Connect them to the stand, using bolts and nuts provided.
1b.	Place the strong back behind the bearing and tighten bolts until you engage the inner ring.
2.	Retract the piston of the TMHS 100 spindle by releasing the valve.
3.	Insert the proper main rods and if needed the extension rods
4.	Select the most proper extension pieces, assemble the nosepiece and screw in the complete hydraulic spindle until you reach the end of the shaft.
5.	Close the safety valve and insert the handle bar with handle grip.
6.	Start pumping in order to generate dismounting force. In case the stroke is not sufficient repeat steps 2, 4, 5 and 6 until the part is fully disassembled.



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