FORZA

External mechanical puller 1300 series

User´s Manual

1300

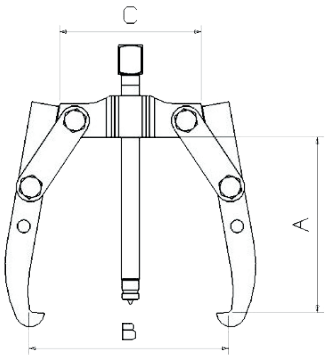
ÍNDICE

1. TECNHICAL FEATURES

- Two and three jaws pullers.
- Standard jaws (2 holes), long ones (3 holes) extra-long ones (4 holes).
- For exteriors.
- Forged jaws.

2. DIMENSIONS OF THE TWO JAWS PULLER

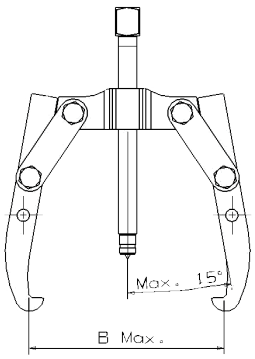
Item number with L long jaws with X Extra long jaws.

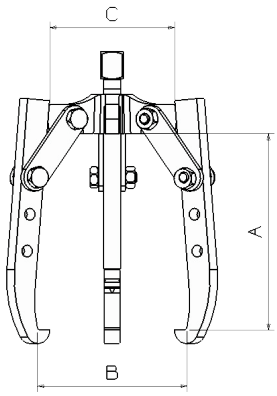


Reference	A	B	C	Ton.	Weight
1300	60	60	37	0.5	0.2
1300L	70	67	37	0,5	0,2
1301	85	100	70	1	0,4
1301L	105	110	70	1	0,5
1304	135	150	76	4	1,2
1304L	185	175	76	4	1,4
1307	180	200	113	7	2,3
1307L	225	240	113,5	7	2,5
1308	180	250	160	7	2,7
1308L	225	290	160	7	2,9
1310	300	310	161	10	5,5
1310L	385	360	161	10	6
1310X	460	410	161	10	7,6
1317	370	425	280	17	11,5
1317L	480	480	280	17	13
1317X	600	540	280	17	15
1330	460	520	325	30	25,5
1330L	585	580	325	30	30
1330X	710	720	325	30	34,5
1350	750	850	402	50	49
1350L	900	980	402	50	55,5
1350X	1050	1080	402	50	62,3

2.1 DIMENSIONS OF THE THREE JAWS PULLER

The height in the chart is the maximum vertical position.
The opening is the maximum while opening at a 15 degrees angle.

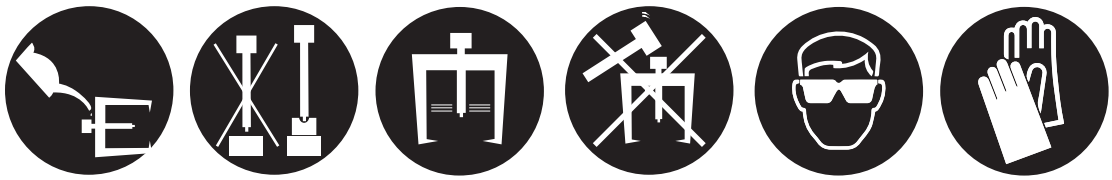




Combina con
2/3 patas

Reference	A	B	C	TON	Weight	Combine 2/3
1300T	60	65	37	0.5	0.3	No
1300LT	70	77	47	0,5	0,3	No
1301T	85	105	70	1	0,7	Si
1301LT	105	115	70	1	0,7	Si
1304T	135	150	76	4	1,8	Si
1304LT	185	175	76	4	2,1	Si
1307T	180	200	108	7	3,3	Si
1307LT	225	240	108	7	3,5	Si
1308T	180	250	160	7	3,7	Si
1308LT	225	290	160	7	3,9	Si
1310T	300	310	161	10	7,5	Si
1310LT	385	360	161	10	8,5	Si
1310XT	460	410	161	10	10,9	Si
1317T	370	425	280	17	16,5	No
1317LT	480	480	280	17	18,5	No
1317XT	600	540	280	17	20,5	No
1330T	460	520	325	30	33,5	No
1330LT	585	580	325	30	39	No
1330XT	710	720	325	30	45,5	No
1350T	750	850	402	50	65	No
1350LT	900	980	402	50	75	No
1350XT	1050	1080	402	50	85,5	No

3. USER MANUAL



1. Make sure that the spindle is perfectly clean and greased.
2. Check that the shaft is punched otherwise use a point protector.
3. Make sure that jaws are evenly spread out from the spindle.
4. Apply the pulling force by turning the spindle. Never strike the spindle.
5. Never use the spindle while positionned exeedingly out of the body.
6. Make us of all necessary safety equipments.

DO NOT USE POWER TOOLS

4. ARM´S POSITION

It is advisable to place the jaws in the lowest possible hole. In this way, the jaws will be less bended when applying great effort. (Figure 1)

As more height is needed the spindle starts to come out more (Figure 2). If the shaft is bigger, the spindle will come out in excess of the body, (Figure 3), in that case when pulling with the wrench we can twist the spindle.

When the height of the spindle is very high, it is better to change the position of the legs. (Figure 4).

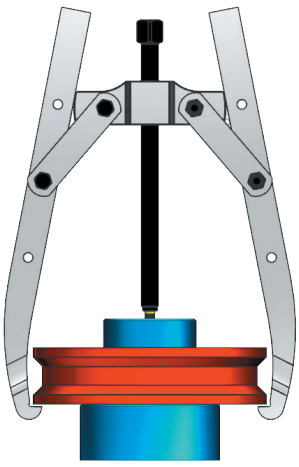


Figure 1

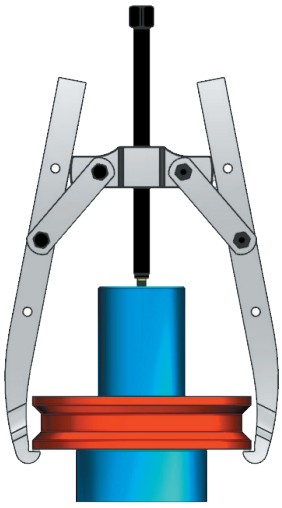


Figure 2

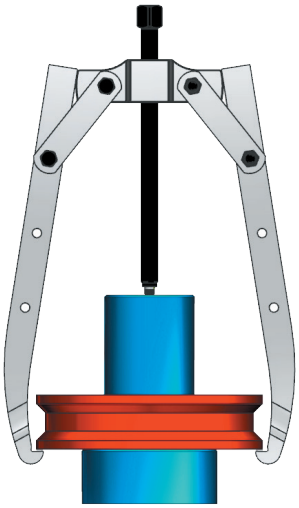


Figure 3

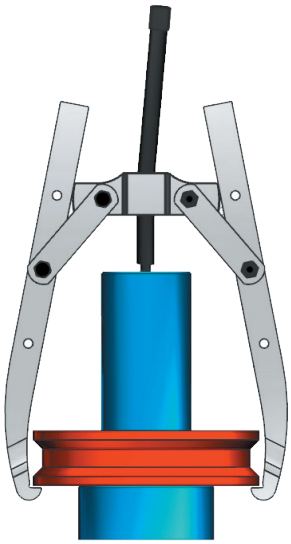


Figure 4

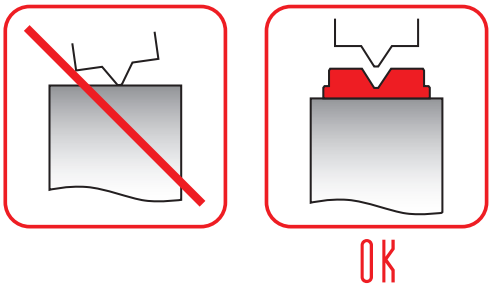
This series of puller can mount standard arms (05), long arms (06) or extra-long (16).
The puller has more force when arms are set in the lowest holes.
In this position arm bend less when applying great force (Figure 1).

But if the spindle sticks out too much from the body it might bend when using the wrench (Figure 4). This type of bending might lead to the catching of the spindle.
Chose cautiously the position of the arms.

5. SPINDLE POINT

Fixed spindle point (1300 to 1307)

The spindles featuring a tempered point must be protected when the shaft is not punched.



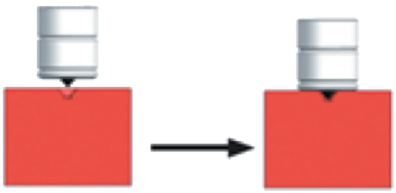
Spindle with retractable point (1310 and beyond)

A Big size pullers come with a retractable point making the point protector uncessary. Following are the instructions how to use the aforesaid point.


Muelle

a) Case 1

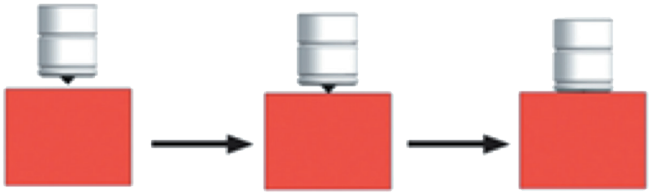
If the spindle thrusts against a pointed shaft then the point slides in easily.



Fixed point for pointed shaft

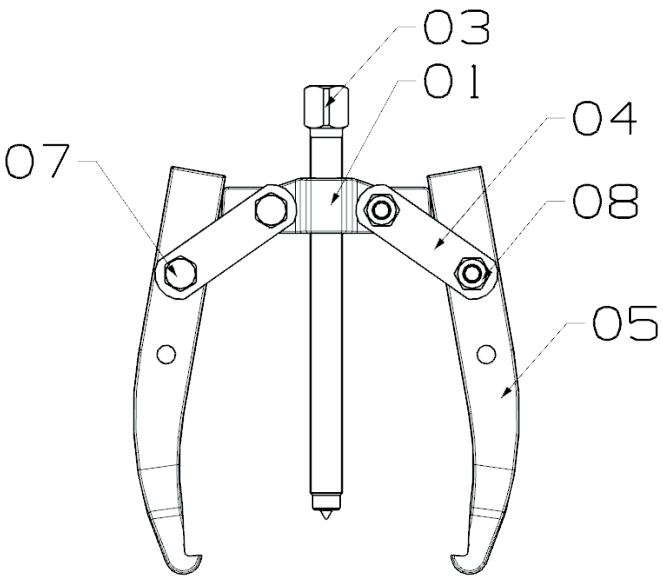
b) Case 2

Whenever the spindle pushes against a pointed shart the point slides in to ease the pulling.

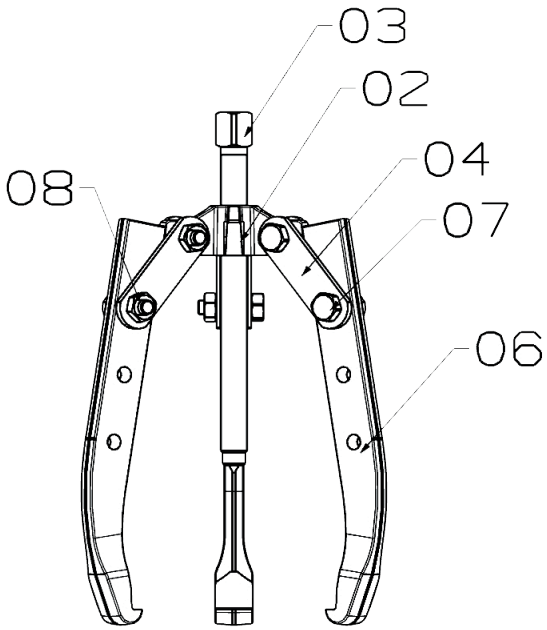


Retractable point for flat shaft

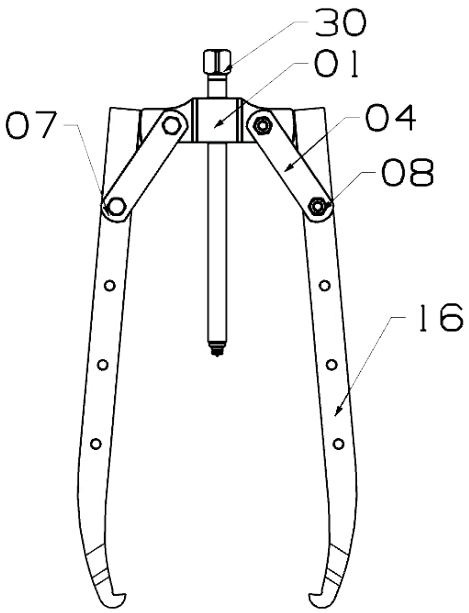
6. EXPLODED VIEW

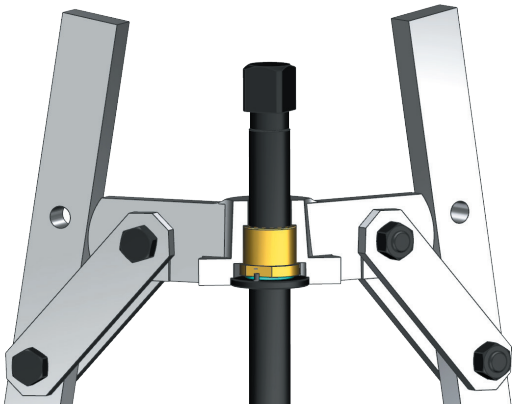


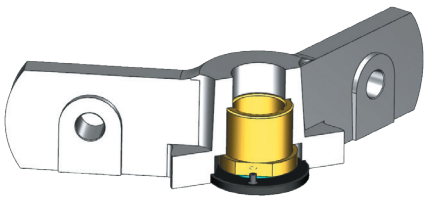
Spare part 2 short arms



Spare part 3 extra-long arms



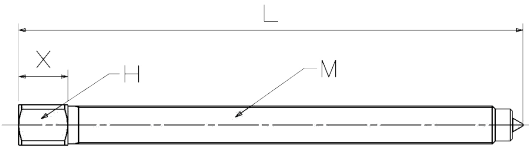


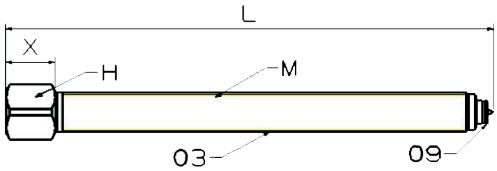


Spare parts 2 long arms

"T" bodies of big pullers can be acquired equipped with the bronze nut and the cover. The references are: 131722, 133022 and 13522. (See comments from page 10).

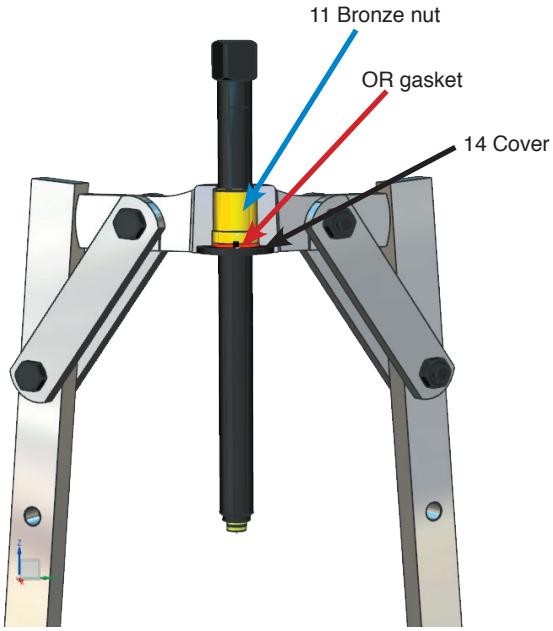
Spindle





Reference	Screw	L	X	H	Point	Puller
130003	M8 x 1	90	12	9	Fix	1300 / 1300T
130103	M10 x 1	124	14	12	Fix	1301 / 1301T / 1301L/1301LT
130403	M14 x 1,50	177	20	16	Fix	1304 / 1304T / 1304L/1304LT
130703	M18 x 1,50	235	24	19	Fix	1307 / 1307T /1307L/1307LT
131031	M20 x 1,50	321	25	22	Interchangeable	1310 / All models
131731	M27 x 2	377	30	27	Interchangeable	1317 / All models
133031	1 3/8" 12h.	510	38	35	Interchangeable	1330 / All models
135032	1 3/8" 12h.	535	38	35	Interchangeable	1350 / All models

Bodies

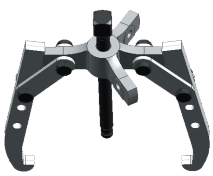


*For 1317T, 1317LT and 3117XT pullers acquired after 01/07/2018, bronze nut reference is 131712.

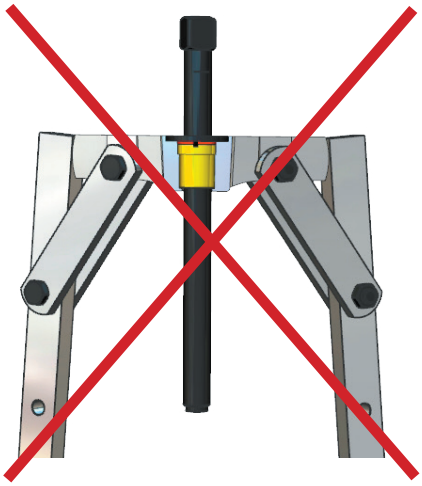
The bodies of the pullers 13017T 1330 1330T 1350 1350 T They feature a bronze nut to enhance the force. These nuts rest against a toric gasket designed to absorbe hammering impacts when pulling out the piece. The whole is encased with 2 screws

3 ars bodies

The bodies 1301T, 1304T , 1307T y 1310T are 2 and 3 arms.

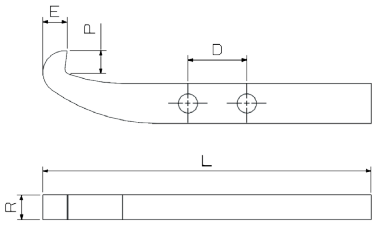


Combina con 2/3 patas

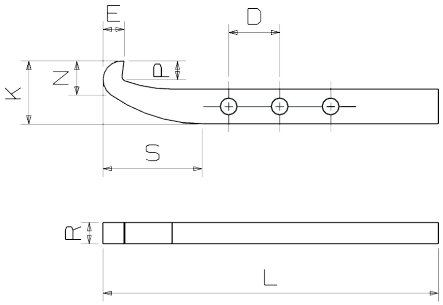


If the body is assembled in the inverted position, the M-5 screws will support all the load and they will break.

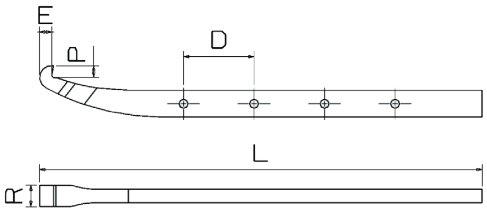
Arms



Short jaw



Long jaw



Extra-long jaw 16

Ref arms	P	R	E	L	D	K	M	S
130005	4,5	6,5	5	70	13	16	9	16
130006	4,5	6,5	5	85	13	16	9	16
130105	6,5	8	7	106	19	23	13	39
130106	7	7,5	8	127	19	23	13	39
130405	7	21	7	166	51	40	15	62
130406	8	21	7,5	219	51	40	15	62
130705	8,5	25	9	217	44,5	53	19	100
130706	8	25	10	264	44,5	53	19	100
131005	15	25	12,5	355	83	61	30	130
131006	15	25	12,5	436	83	61	30	130
131016	15	25	12,5	516	83	61	30	130
131705	15,5	32	16	435	115	85	32	130
131706	17,5	31	15,5	550	115	85	32	130
131716	17,5	31	15,5	665	115	85	32	130
133005	23	42	22	557	125	95	60	215
133006	24	41	22	698	125	95	60	215
133016	24	41	22	823	125	95	60	215
135205	27	50	30	850	150	120	120	250
135206	27	50	30	1060	150	120	120	250
135216	27	50	30	1210	150	120	120	250

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