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# ONLY AVAILABLE AS AN ASSEMBLY BUT SPARE BALLS, SPRONG AND CLIP INCLUDED ON THE SERVICE KIT.

**IMPORTANT**  
WHEN ORDERING SPARES YOU MUST STATE THE FULL PART NUMBER AND THE PRODUCT SERIAL NUMBER - FROM THE LABEL TO PROTECT YOUR WARRANTY ALWAYS USE GENUINE HI-FORCE PARTS.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TTC150BA002	BODY	1
2	TTC150AA001	PLUG	2
3	*	PLUG	1
4	*	3/16 BALL	2
5	*	GRUB SCREW	2
6	TTC150FS002	SLEEVE	2
7	TTC150FB001	BEARING	2
8	*	RETAINING RING	2
9	TTC150DS001	SQUARE DRIVE	1
10	TTA150LA001	RELEASE BUTTON ASSY	1
11	TTC150WS001	RATCHET WHEEL	1
12	TTC150CS001	DRIVE PLATE	1
13	TTC150PS001	PAWL	1
14	*	SPRING	2
15	TTC150JS001	PIVOT PIN	1
16	*	CUP PT SCREW	2
17	TTC150ES001	END PLUG	1
18	*	BACK UP RING	1
19	*	O - RING	1
20	*	PISTON SEAL	1
21	TTA150NS001	PISTON ASSEMBLY	1
22	*	LIP SEAL	1
23	*	O - RING	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
24	TTC150GB001	GLAND	1
25	*	BUTTON HEAD SCREW	3
26	TTC150LS002	SHROUD	1
27	TTC150KS001	SPLINE SLEEVE	1
28	TTC150QA002	REACTION ARM	1
29	TTC150ES002	END CAP	1
30	*	SKT CSK SCREW	2
31	*	SPRING	1
32	TTC150JS002	LATCH PIN	1
33	TTC150AS001	PLUG	1
34	TTC150JS003	RELEASE	1
35	*	O- RING	2
36	TTC100SA001	MALE SWIVEL CONNECTOR	1
37	*	SOCKET CAP HD SCREW	4
38	TTC045SA002	FEMALE SWIVEL CONNECTOR	1
39	*	O- RING	3
40	TTC045SA003	SWIVEL CONNECTOR CAP	1
41	*	SKT CSK SCREW	1
42	CF4F	COUPLER	1
43	CM4F	COUPLER	1
44	HF7	1/4" NPT MALE ADAPTOR	2
45	*	SPRING	1
46	VRA280GB001	SPRING SEAT	1

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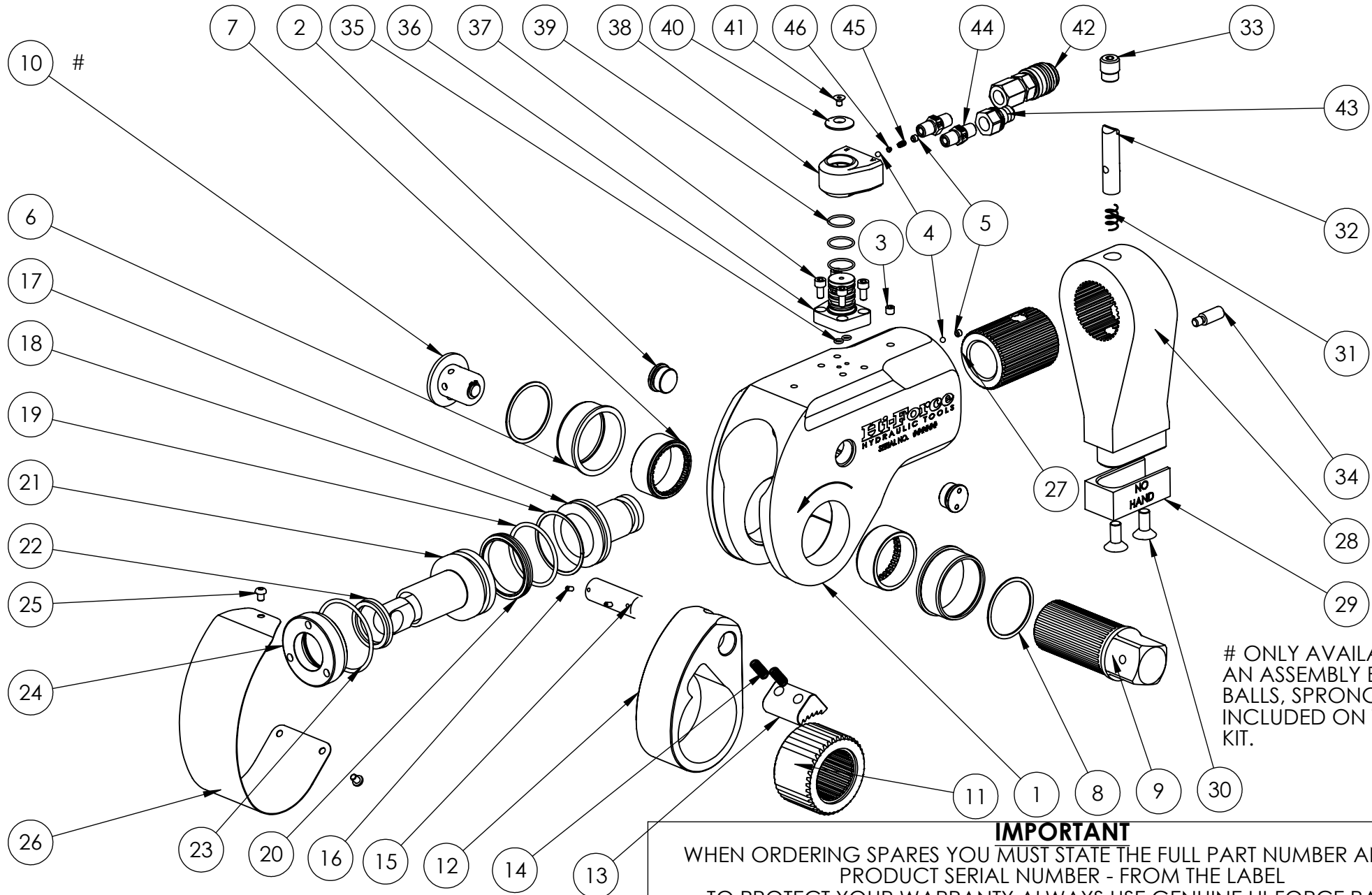
ITEMS MARKED \* ARE AVAILABLE  
IN TWS150NTP2-K SERVICE KIT ONLY

NOTE, ITEMS 35 AND 37 ARE ALSO AVAILABLE IN  
TWSHTP2-K SWIVEL KIT

GLAND WRENCH (FOR ITEM 24) ATC150PT001  
REACTION ARM ASSEMBLY - COMPLETE TTA150QA001  
SWIVEL ASSEMBLY - COMPLETE TTA100SA001

**IMPORTANT**

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7	TTC150FB001	BEARING	2
8	*	RETAINING RING	2
9	TTC150DS001	SQUARE DRIVE	1
10	TTA150LA001	RELEASE BUTTON ASSY	1
11	TTC150WS001	RATCHET WHEEL	1
12	TTC150CS001	DRIVE PLATE	1
13	TTC150PS001	PAWL	1
14	*	SPRING	2
15	TTC150JS001	PIVOT PIN	1
16	*	CUP PT SCREW	2
17	TTC150ES001	END PLUG	1
18	*	BACK UP RING	1
19	*	O - RING	1
20	*	PISTON SEAL	1
21	TTA150NS001	PISTON ASSEMBLY	1
22	*	LIP SEAL	1
23	*	O - RING	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
24	TTC150GB001	GLAND	1
25	*	BUTTON HEAD SCREW	3
26	TTC150LS002	SHROUD	1
27	TTC150KS001	SPLINE SLEEVE	1
28	TTC150QA002	REACTION ARM	1
29	TTC150ES002	END CAP	1
30	*	SKT CSK SCREW	2
31	*	SPRING	1
32	TTC150JS002	LATCH PIN	1
33	TTC150AS001	PLUG	1
34	TTC150JS003	RELEASE	1
35	*	O- RING	2
36	TTC100SA001	MALE SWIVEL CONNECTOR	1
37	*	SOCKET CAP HD SCREW	4
38	TTC045SA002	FEMALE SWIVEL CONNECTOR	1
39	*	O- RING	3
40	TTC045SA003	SWIVEL CONNECTOR CAP	1
41	*	SKT CSK SCREW	1
42	CF4F	COUPLER	1
43	CM4F	COUPLER	1
44	HF7	1/4" NPT MALE ADAPTOR	2
45	*	SPRING	1
46	VRA280GB001	SPRING SEAT	1

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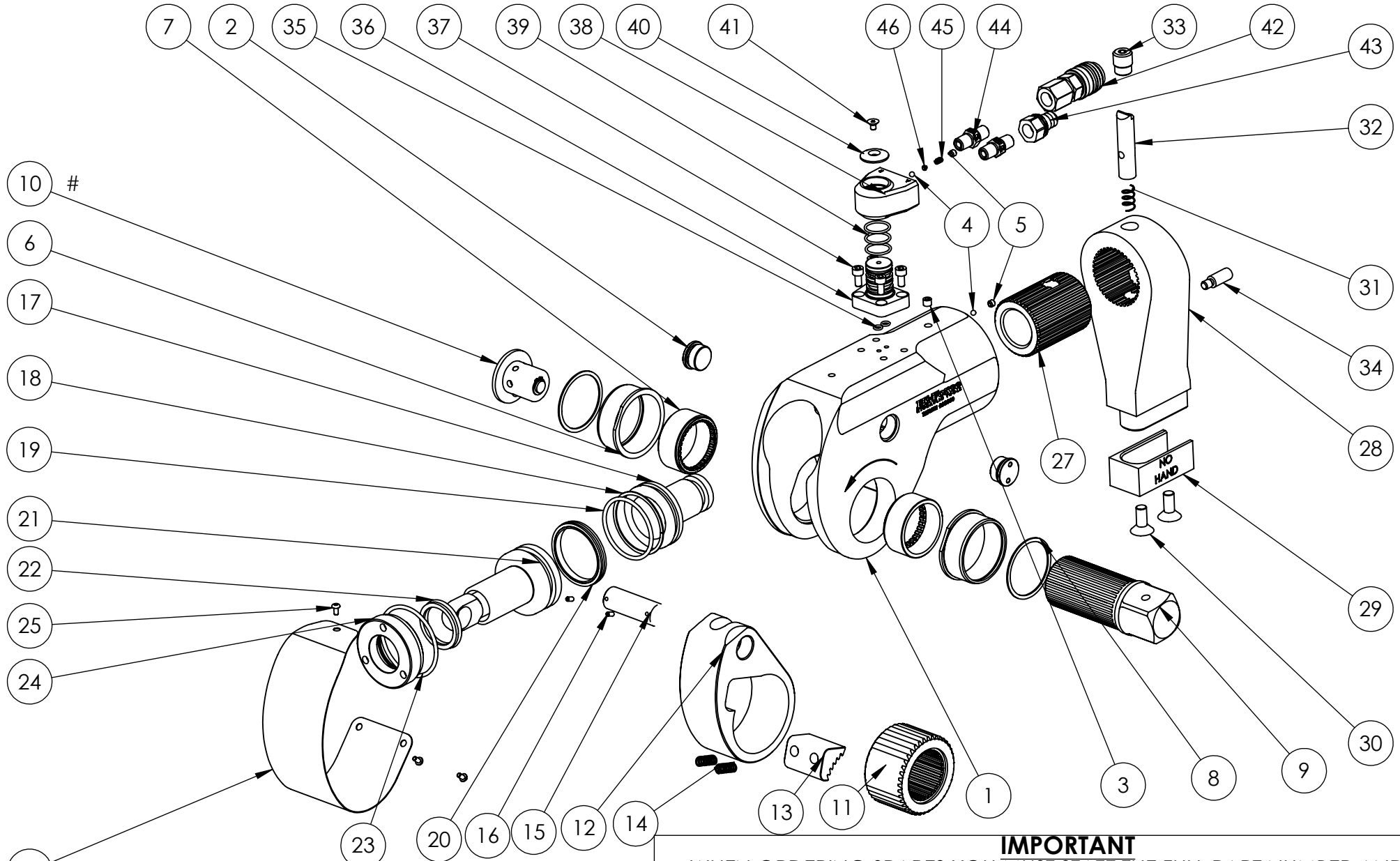
ITEMS MARKED \* ARE AVAILABLE  
IN TWS150NTP2-K SERVICE KIT ONLY

NOTE, ITEMS 35 AND 37 ARE ALSO AVAILABLE IN  
TWSHTP2-K SWIVEL KIT

GLAND WRENCH (FOR ITEM 24) ATC150PT001  
REACTION ARM ASSEMBLY - COMPLETE TTA150QA001  
SWIVEL ASSEMBLY - COMPLETE TTA100SA001

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**IMPORTANT**  
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ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	TTC150BA001 NOTE 2	BODY	1
2	TTC150AA001	PLUG	2
3	*	PLUG	1
4	*	3/16 BALL	2
5	*	GRUB SCREW	2
6	TTC150FS001	SLEEVE	2
7	TTC150FB001	BEARING	2
8	*	RETAINING RING	2
9	TTC150DS001	SQUARE DRIVE	1
10	TTA150LA001	RELEASE BUTTON ASSY	1
11	TTC150WS001	RATCHET WHEEL	1
12	TTC150CS001	DRIVE PLATE	1
13	TTC150PS001	PAWL	1
14	*	SPRING	2
15	TTC150JS001	PIVOT PIN	1
16	*	CUP PT SCREW	2
17	TTC150ES001	END PLUG	1
18	*	BACK UP RING	1
19	*	O - RING	1
20	*	PISTON SEAL	1
21	TTA150NS001	PISTON ASSEMBLY	1
22	*	LIP SEAL	1
23	*	O - RING	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
24	TTC150GB001	GLAND	1
25	*	BUTTON HEAD SCREW	3
26	TTC150LS001	SHROUD	1
27	TTC150KS001	SPLINE SLEEVE	1
28	TTC150QA001	REACTION ARM	1
29	TTC150ES002	END CAP	1
30	*	SKT CSK SCREW	2
31	*	SPRING	1
32	TTC150JS002	LATCH PIN	1
33	TTC150AS001	PLUG	1
34	TTC150JS003	RELEASE	1
35	*	O- RING	2
36	TTC100SA001	MALE SWIVEL CONNECTOR	1
37	*	SOCKET CAP HD SCREW	4
38	TTC045SA002	FEMALE SWIVEL CONNECTOR	1
39	*	O- RING	3
40	TTC045SA003	SWIVEL CONNECTOR CAP	1
41	*	SKT CSK SCREW	1
42	CF4F	COUPLER	1
43	CM4F	COUPLER	1
44	HF7	1/4" NPT MALE ADAPTOR	2
45	*	SPRING	1
46	VRA280GB001	SPRING SEAT	1

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ITMS MARKED \* ARE AVAILABLE  
IN TWS150NTP2-K SERVICE KIT ONLY

NOTE

- ITEMS 35 AND 37 ARE ALSO AVAILABLE IN TWSHTP2-K SWIVEL KIT
- OBSOLETE PART. ORDER TTC150BA002 AND SHROUD TTC150LS002

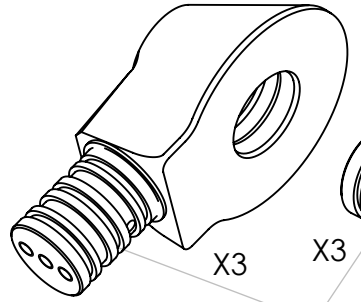
[www.hi-force.com](http://www.hi-force.com)

GLAND WRENCH (FOR ITEM 24) ATC150PT001  
REACTION ARM ASSEMBLY - COMPLETE TTA150QA001  
SWIVEL ASSEMBLY - COMPLETE TTA100SA001

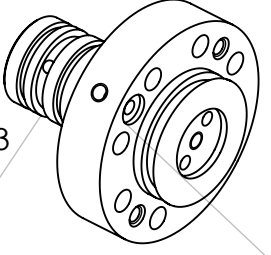
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DO NOT SCALE

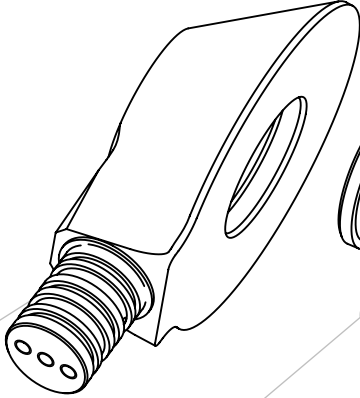


X3



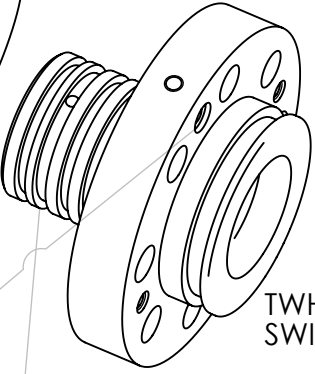
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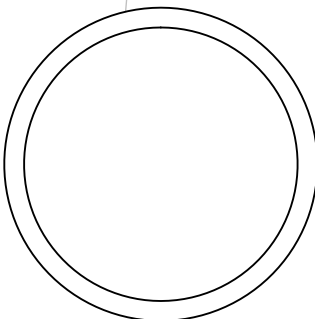
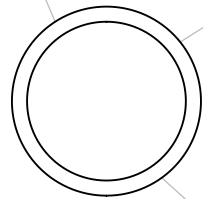
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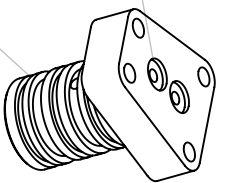
TWH210N  
SWIVEL ASSEMBLY

TWH27N  
TWH54N  
TWH120N  
SWIVEL ASSEMBLY



X3

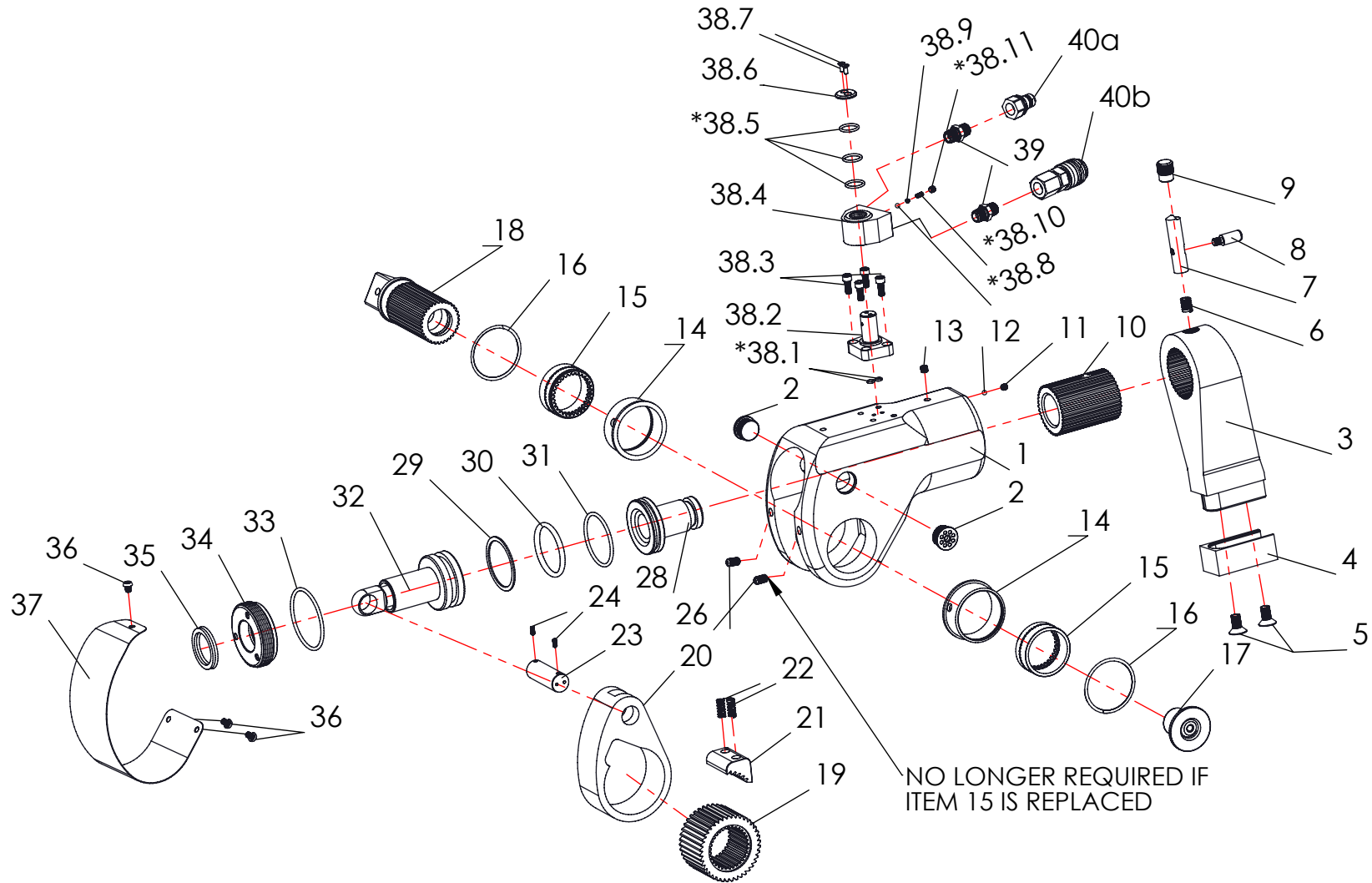
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TWS17N  
TWS45N  
TWS100N  
TWS150N  
TWS370N  
TWH430N  
SWIVEL POST

TWSHTP2-K SWIVEL SEAL KIT  
(ALL SERIAL NUMBERS EXCEPT THOSE STARTING WITH "D")

PRINT OUT AT FULL SIZE AND  
USE AS TEMPLATE TO AID  
O-RING IDENTIFICATION



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REF	Part	PART NUMBER	REF	Part	PART NUMBER
1	Housing	TTC150BA001	22	Drive Segment Spring	*
2	Housing Threaded Plug	TTC150AA001	23	Drive Pin	TTC150JS001
3	Reaction Arm	TTC150QA001	24	Drive Pin Screw	FAS004ME008
4	Reaction Arm Cover	TTC150ES002	26	Ball Plunger	*
5	Cover Screws	*	28	End Plug	TTC150ES001
6	Reaction Arm Spring	*	29	Piston Seal	*
7	Locking Pin	TTC150JS002	30	O-ring	*
8	Retract Button	TTC150JS003	31	Back up ring	*
9	Reaction Arm Screw	TTC150AS001	32	Piston Rod Assembly	TTA150NS001 (NOTE 2)
10	Spline Sleeve	TTC150KS001	33	Housing Seal	*
11	Housing Screw	*	34	Cylinder Gland	TTC150GB001
12	5 mm Steel Ball	*	35	Gland Seal	*
13	Casing Cap	FPC002PN001	36	Shroud Screw	*
14	Drive Bushing	TTC150FS001	37	Shroud	TTC150LS001
15	Sleeve	TTC150FB001	38	Uniswivel	TTA100SA001
16	Sleeve Retainer Clip	*	39	Fitting	HF7
17	Drive Retainer	TTA150LA001	40a	Quick Coupler (Male)	CM4F
18	Square Drive	TTC150DS001	40b	Quick Coupler (Female)	CF4F
19	Ratchet	TTC150WS001		Gland Wrench	ATC150PT001
20	Drive Plate	TTC150CS001		Reaction Arm Assy	TTA150QA001
21	Drive Segment	TTC150PS001			

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ITEMS MARKED \* ARE AVAILABLE  
IN TWS150NTP1-K SERVICE KIT ONLY  
N.B. SOME ITEMS NOT SHOWN IN TABLE  
REFER TO DRAWING ALSO

NOTE 1: ITEMS 38.1 & 38.5  
ALSO AVAILABLE IN TWSHTP1-K SWIVEL KIT.

NOTE 2: IF PISTON ROD ASSEMBLY IS REPLACED  
SERVICE KIT TWS150NTP2-K WILL ALSO BE REQUIRED  
FOR CURRENT VERSION OF PISTON SEAL

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DO NOT SCALE

**WARNING**  
ON TWH210N TOOLS  
WITH THIS TYPE OF SWIVEL IT  
IS STRONGLY RECCOMENDED THAT  
THE WHOLE ASSEMBLY IS REPLACED  
WITH TWH210N-SK ASSEMBLY KIT

