Fill, Draw, & Torque Sheet

Key Model of this Tool Group	Full Volume of Liner Oil in Pulse Unit (approx.)	Volume to be Removed from the Full Volume (approx.)	Torque to Tighten Liner Casing Setter (approx.)	Torque to Tighten Liner Casing Setter (approx.)	Load to Press on Rear Liner Plate	Load to Press on Rear Liner Plate
					Hydraulic Press	P.T.R.F.
Model	**cc's**	**cc's**	**NM**	**Ft-Lbs**	**Tons**	**Ft-Lbs/Nm**
ALPHA-45(S)(D) & 61(D)	5.0	0.45+/-.05	70+/-5	52+/-4		
ALPHA-50(S)(D) & L61(D)	5.0	0.50+/-.05	70+/-5	52+/-4		
ALPHA-50MC, 60MC & 70MC	5.0	0.45+/-.05	70+/-5	52+/-4		
ALPHA-60(S)(D)	6.2	0.55+/-.05	85+/-5	63+/-4		
ALPHA-70(S)(C)(CH)	8.8	0.80+/-0.1	110+/-5	81+/-4	2	40/54
ALPHA-80	12.0	1.00+/-0.1	135+/-5	100+/-4	2	40/54
ALPHA-80MC & 90MC	6.2	0.55+/-.05	85+/-5	63+/-4		
ALPHA-90	14.0	1.00+/-0.1	150+/-5	110+/-4	3	60/81
ALPHA-100	19.0	1.70+/-0.1	185+/-10	137+/-7	3	60/81
ALPHA-100MC & 101MC	12.0	0.80+/-0.1	135 +/-5	100+/-4	2	40/54
ALPHA-110MC	12.0	0.95+/-0.1	135+/-5	100+/-4	2	40/54
ALPHA-130	24.0	2.00+/-0.1	185+/-10	137+/-7	3	60/81
ALPHA-130MC	24.0	1.80+/-0.1	185+/-10	137+/-7	3	60/81
ALPHA-140 & 140MC	31.5	2.30+/-0.1	200+/-10	148+/-7	3.5	70/95
ALPHA-160	48.0	2.40+/-0.1	260+/-10	192+/-7	4	80/108
ALPHA-180	48.0	4.80+/-0.1	290+/-10	214+/-7	4	80/108
ALPHA-T40D(S), T42D(S)(P), T45(S)(D)(P), T46(D), T47(S)(D)(P), T50(D) & T52(D)	5.0		70+/-5	52+/-4		
ALPHA-T60(D) & T62(D)(MI)	6.2		85+/-5	63+/-4		
ALPHA-T65(S) & T70(S)(C)(CH)	8.8	0.75+/-.05	110+/-5	81+/-4	2	40/54
ALPHA-T80	12.0	0.80+/-.05	135+/-5	100+/-4	2	40/54
ALPHA-T90	14.0	0.95+/-.05	150+/-5	110+/-4	3	60/81
ALPHA-T100	19.0	1.40+/-0.1	185+/-10	137+/-7	3	60/81
ALPHA-T130	24.0	1.80+/-0.1	185+/-10	137+/-7	3	60/81
ALPHA-T140	31.5	1.90+/-0.1	200+/-10	148+/-7	3.5	70/95
U-50EC	5.0	0.15	50+/-5	37+/-4		
U-60EC	8.5	0.35	70+/-5	52+/-4		
U-80EC	9.0	0.40	70+/-5	52+/-4	3	60/81
U-100EC	18.0	0.90	70+/-5	52+/-4	3	60/81
U-300SD, U-310SD, U-350(S)(D)	5.0	0.15	50+/-5	37+/-4		
U-410(S)(D)	8.5	0.35	70+/-5	52+/-4		
U-480, U-501	9.0	0.40	70+/-5	52+/-4	3	60/81
U-610, U-610T	13.0	0.55	70+/-5	52+/-4	3	60/81
U-700, U-700T	18.0	0.90	70+/-5	52+/-4	3	60/81
U-800, U-800T	20.0	1.00	90+/-5	67+/-4	3	60/81
U-900, U-900T	25.0	1.25	100+/-5	74+/-4	3	60/81
U-1000, U-1000T	32.0	1.70	110 +/-5	81+/-4	3	60/81
U-1301, U-1301T	38.0	2.00	120+/-10	89+/-7	4	80/108
UA-40(S)(D)MC, 400AMC & UA-50(S)(D)MC, 500AMC	7.0	0.35+/-.01	85+/-5	63+/-4	1.5	30/41
UA-60(S)MC & 600AMC	8.2	0.40+/-.01	85+/-5	63+/-4	1.5	30/41
UA-70(S)MC & 700AMC	10.3	0.70+/-.05	110+/-5	81+/-4	2	40/54
UA-80AMC & 800AMC	12.0	0.80+/-.05	110+/-5	81+/-4	2	40/54
UA-90MC & 90AMC	15.8	0.90+/-.05	150+/-5	110+/-4	3	60/81
UA-100MC, 100AMC, 1000AMC	21.7	1.50+/-0.1	185+/-5	137+/-7	3	60/81
UA-130MC, 130AMC, 1300AMC	29.4	1.50+/-0.1	185+/-10	137+/-7	3	60/81

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					Hydraulic Press	P.T.R.F.
Model	**cc's**	**cc's**	**NM**	**Ft-Lbs**	**Tons**	**Ft-Lbs/Nm**
UAT-30D(SD)	5.0	0.19+/-.01	85+/-5	63+/-4	1	20/27
UAT-40(S)(D), UAT-50(S)(D)	5.6	0.26+/-.01	85+/-5	63+/-4	1	20/27
UAT-60(S)(D)	6.2	0.35+/-.01	85+/-5	63+/-4	1	20/27
UAT-70(S)	8.8	0.60+/-.05	110+/-5	81+/-4	2	40/54
UAT-80	12.0	0.80+/-.05	135+/-5	100+/-4	2	40/54
UAT-90	14.0	0.90+/-.05	150+/-5	110+/-4	3	60/81
UAT-100	21.5	1.40+/-0.1	185+/-10	137+/-7	3	60/81
UAT-130	24.0	1.40+/-0.1	185+/-10	137+/-7	3	60/81
UAT-200	81.5	5.60+/-0.1	320+/-10	236+/-7	4.5	90/122
UBP-65	8.0	0.70+/-.05	85+/-5	63+/-4	3	60/81
UBP-T40 & T50	5.6	0.35 -.04	85+/-5	63+/-4	1	20/27
UBP-T60	6.2	0.45+/-.05	85+/-5	63+/-4	1	20/27
UDBP-T40 & T50	5.6	0.35 -.04	85+/-5	63+/-4	1	20/27
UDBP-T60	6.2	0.45+/-.05	85+/-5	63+/-4	1	20/27
UDBP-T70	8.8	0.70+/-.05	110+/-5	81+/-4	2	40/54
UDBP-TA40	5.6	0.26+/-.01	85+/-5	63+/-4	1.5	30/41
UDBP-TA50	5.6	0.28+/-.01	85+/-5	63+/-4	1.5	30/41
UDBP-TA60	6.2	0.37+/-.01	85+/-5	63+/-4	1.5	30/41
UDBP-TA70(P)	8.8	0.60+/-.05	110+/-5	81+/-4	2	40/54
UDP-A60MC	5.6	0.30+.05	85+/-5	63+/-4	1.5	30/41
UDP-A80MC	8.8	0.65+.05	110+/-5	81+/-4	2	40/54
UDP-TA40	5.6	0.28+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA40D	5.6	0.28+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA50	5.6	0.28+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA50D	5.6	0.28+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA55	6.2	0.37+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA55D	6.2	0.37+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA60	6.2	0.37+/-.01	85+/-5	63+/-4	1.5	30/41
UDP-TA60D	6.2	0.37+/-.01	85+/-5	63+/-4	1.5	30/41
UEP-50(D) & 50MC(D)	5.5	0.35+/-.05	70+/-5	52+/-4	1	20/27
UEP-60(D) & 60MC(D)	6.8	0.55+/-.05	85+/-5	63+/-4	1	20/27
UEP-70 & 70MC	8.8	0.65+/-.05	110+/-5	81+/-4	2	40/54
UEP-80 & 80MC	14.0	0.90+/-.05	150+/-5	110+/-4	3	60/81
UEP-100 & 100MC	19	1.50+/-.05	185 /-10	137+/-7	3	60/81
UL-30(D)	5.0	0.31+/-.01	85+/-5	63+/-4		
UL-40(D), UL-40A(D)MC	5.0	0.35+/-.01	85+/-5	63+/-4	1	20/27
UL-50(S)(D) & 50(D)MC, UL-40(D)MC, UL-50A(D)MC	5.0	0.45+/-.05	85+/-5	63+/-4	1	20/27
UL-60(S)(D), 60MC, 60AMC	6.8	0.55+/-.05	85+/-5	63+/-4	1	20/27
UL-70, UL-70MC, 70AMC	8.0	0.65+/-.05	110+/-5	81+/-4	2	40/54
UL-80	14.0	0.80+/-.05	110+/-5	81+/-4	2	40/54
UL-90, UL-90MC, 90AMC, 900AMC	14.0	0.95+/-.05	150+/-5	110+/-4	3	60/81
UL-100	19	1.50+/-.05	185+/-10	137+/-7	3	60/81
UL-100MC, 100AMC	21.5	1.60+/-0.1	185+/-10	137+/-7	3	60/81
UL-130	27.0	1.70+/-0.1	185+/-10	137+/-7	3	60/81
UL-130MC, 130AMC	24.0	1.60+/-0.1	185+/-10	137+/-7	3	60/81
UL-150	36.6	2.60+/-0.1	200+/-10	148+/-7	3	60/81
ULT-30 (D)(S)	5.0	0.30+/-.01	85+/-5	63+/-4	1	20/27
ULT-40(S)(D) & 50(S)(D)(C),	5.6	0.35 -.04	85+/-5	63+/-4	1	20/27
ULT-60(S)(D)(C)	6.2	0.45+/-.05	85+/-5	63+/-4	1	20/27
ULT-70(S)(C)(CH)	8.8	0.70+/-.05	110+/-5	81+/-4	2	40/54

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					Hydraulic Press	P.T.R.F.
Model	**cc's**	**cc's**	**NM**	**Ft-Lbs**	**Tons**	**Ft-Lbs/Nm**
ULT-80	12.0	0.85+/-.05	110+/-5	81+/-4	2	40/54
ULT-90	14.0	1.00+/-.05	150+/-5	110+/-4	3	60/81
ULT-100	21.5	1.60+/-0.1	185+/-10	137+/-7	3	60/81
ULT-130	24.0	1.60+/-0.1	185+/-10	137+/-7	3	60/81
ULT-150	31.5	2.20+/-0.1	200+/-10	148+/-7	3.5	70/95
ULT-180	39.0	3.30+/-0.1	260+/-10	192+/-7	4	80/108
UX-450(S)(D)	5.0	0.50+/-.05	70+/-5	52+/-4		
UX-500(S)(D)(C)	5.0	0.50+/-.05	70+/-5	52+/-4		
UX-612(S)(D)(C)(A)	6.2	0.65+/-.05	85+/-5	63+/-4		
UX-622(D)	6.2	0.65+/-.05	85+/-5	63+/-4		
UX-700(S)(D)(C) & 80EC	8.8	0.80+/-0.1	110+/-5	81+/-4	2	40/54
UX-800(S)(C) & ST800	12.0	0.80+/-0.1	135+/-5	100+/-4	2	40/54
UX-900(S)(C) & 120EC	14.0	0.95+/-0.1	150+/-5	110+/-4	3	60/81
UX-1000(S)(C) & 130EC	19.0	1.50+/-0.1	185+/-10	137+/-7	3	60/81
UX-1300(S), T1300 & TL1300	24.0	1.80+/-0.1	185+/-10	137+/-7	3	60/81
UX-1400	31.5	2.00+/-0.1	200+/-10	148+/-7	3.5	70/95
UX-1620	33.5	2.20+/-0.1	200+/-10	148+/-7	4	80/108
UX-T700, T700L & TL700	8.8	0.70+/-.05	110+/-5	81+/-4	2	40/54
UX-T800 & TL800	12.0	0.80+/-.05	135+/-5	100+/-4	2	40/54
UX-T900 & TL900	14.0	0.95+/-.05	150+/-5	110+/-4	3	60/81
UX-T1000 & TL1000	19.0	1.40+/-0.1	185+/-10	137+/-7	3	60/81
UX-T1400 & TL1400	31.5	1.90+/-0.1	200+/-10	148+/-7	3.5	70/95
UX-T1620 & TL1620	33.5	2.10+/-0.1	200+/-10	148+/-7	4	80/108
UXR-1820	48.0	3.50+/-0.1	260+/-10	192+/-7	4	80/108
UXR-1820MC	48.0	3.50+/-0.1	260+/-10	192+/-7	4	80/108
UXR-2000(S)	84.0	7.00+/-0.2	300+/-10	221+/-7	4	80/108
UXR-2400S	105.0	11.00+/-0.2	650+/-10	480+/-7	5	100/74
UXR-3000S	185.0	14.00+/-0.2	700+/-10	517+/-7	5	100/74
UXR-T1820 & TL1820	48.0	3.50+/-0.1	260+/-10	192+/-7	4	80/108
UXR-T2000 & TL2000	84.0	6.00+/-0.1	300+/-10	221+/-7	4	80/108
UXR-T2400S	105.0	10.50+/-0.2	650+/-10	480+/-7	5	100/74
UXR-T3000S	185.0	13.50+/-0.2	700+/-10	517+/-7	5	100/74