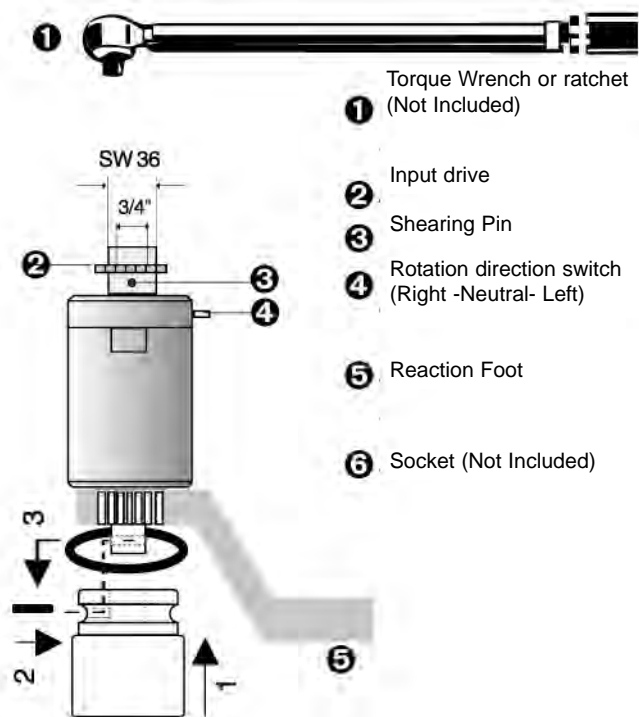


Eliminator HG

Hand Multiplier

For Models:

H10	3/4"
H15	1"
HG10	3/4"
HG15	1
HG20	1
HG30	1 1/2"
HG40	1 1/2"
HG50	1 1/2"
HG60	1 1/2"
HG80	1 1/2"



1. Tightening or loosening using a ratchet

Slide the reaction foot (5) onto the geared spline of the Eliminator Hand Multiplier. Attach the socket (6) onto the drive and secure. Check the rotation direction switch (4) to assure correct direction. Position the Eliminator Hand Multiplier onto the application. Position the reaction foot against the reaction point by turning the input drive (2) until contact is made. Position the ratchet (1) on the input drive and apply continuous force until the application is tightened or loosened satisfactorily.

After you have finished tightening, retain the tension on the ratchet and switch the rotation direction to the neutral position without using force. By reversing the twisting force, the Eliminator Hand Multiplier is free and can be removed.

Caution

The rotation direction switch (4) must be in agreement with rotation of the ratchet.

2. Tightening to torque with a torque wrench

Note the required torque and the corresponding Eliminator Hand Multiplier from the torque table and ascertain the relevant setting value. Using this input setting value, set the torque wrench. After reaching the required torque, release the Eliminator Hand Multiplier and remove.

Note:

The shearing pin (3) built into the drive shaft protects against input overload. However, it is not able to counteract overload peaks at the output side.

Torque Wrench Setting Table for Eliminator HG Hand Multiplier

Take the required torque from the "Output" column in relation to the HG model being used. Select associated setting value from "Input" column and set the torque wrench accordingly. Tolerance: approximately +/- 5% using a certified torque wrench.

Input		Output Models													
lbf.ft	N.m	HG 10 -15		HG 20		HG 30		HG 40		HG 50		HG 60		HG 80	
		lbf.ft	N.m	lbf.ft	N.m	lbf.ft	N.m	lbf.ft	N.m	lbf.ft	N.m	lbf.ft	N.m	lbf.ft	N.m
37	50	129	175	424	575	530	718	590	800	756	1025	886	1200	4649	6300
44	60	155	210	509	690	635	861	708	960	908	1230	1054	1428	5579	7560
52	70	181	245	594	805	741	1005	827	1120	1059	1435	1219	1652	6509	8820
59	80	207	280	679	920	847	1148	945	1280	1210	1640	1402	1900	7439	10080
66	90	232	315	764	1035	953	1292	1063	1440	1362	1845	1568	2124	8369	11340
74	100	258	350	849	1150	1059	1435	1181	1600	1513	2050	1734	2350	9299	12600
81	110	284	385	934	1265	1165	1579	1299	1760	1664	2255	1902	2577	10229	13860
89	120	310	420	1018	1380	1271	1722	1417	1920	1815	2460	2068	2802	11159	15120
96	130	336	455	1103	1495	1377	1866	1535	2080	1967	2665	2252	3051	12088	16380
103	140	362	490	1188	1610	1483	2009	1653	2240	2118	2870	2418	3276	13018	17640
111	150	387	525	1273	1725	1589	2153	1771	2400	2269	3075	2585	3503	13948	18900
118	160	413	560	1358	1840	1694	2296	1889	2560	2421	3280	2751	3728	14878	20160
125	170	439	595	1443	1955	1800	2440	2007	2720	2572	3485	2917	3953	15808	21420
133	180	465	630	1528	2070	1906	2583	2125	2880	2723	3690	3085	4180	16738	22680
140	190	491	665	1613	2185	2012	2727	2244	3040	2875	3895	3267	4427	17668	23940
148	200	517	700	1697	2300	2118	2870	2362	3200	3026	4100	3432	4650	18598	25200
155	210	542	735	1782	2415	2224	3014	2480	3360	3177	4305	3603	4883	19527	26460
162	220	568	770	1867	2530	2330	3157	2598	3520	3328	4510	3767	5104	20457	27720
170	230	594	805	1952	2645	2436	3301	2716	3680	3480	4715	3938	5336	21387	28980
177	240	620	840	2037	2760	2542	3444	2834	3840	3631	4920	4118	5580	22317	30240
185	250	646	875	2122	2875	2648	3588	2952	4000	3782	5125	4280	5800	23247	31500
192	260	672	910	2207	2990	2753	3731	3070	4160	3934	5330	4452	6032	24177	32760
199	270	697	945	2291	3105	2859	3875	3188	4320	4085	5535	4617	6256	25107	34020
207	280	723	980	2376	3220	2965	4018	3306	4480	4236	5740	4784	6482	26037	35280
214	290	749	1015	2461	3335	3071	4162	3424	4640	4387	5945	4970	6734	26967	36540
221	300	775	1050	2546	3450	3177	4305	3542	4800	4539	6150	5136	6960	27896	37800
229	310	801	1085			3283	4449	3660	4960	4690	6355	5308	7192	28826	39060
236	320	827	1120			3389	4592	3779	5120	4841	6560	5479	7424	29756	40320
244	330	852	1155			3495	4736	3897	5280	4993	6765	5631	7630	30686	41580
251	340	878	1190			3601	4879	4015	5440	5144	6970	5816	7881	31616	42840
258	350	904	1225					4133	5600	5295	7175	5985	8110	32546	44100
266	360	930	1260					4251	5760	5446	7380	6150	8334	33476	45360
273	370	956	1295					4369	5920	5598	7585	6316	8558	34406	46620
280	380	982	1330							5749	7790	6484	8786	35335	47880
288	390	1007	1365							5900	7995	6663	9029	36265	49140
295	400	1033	1400									6834	9260		
303	410											6996	9479		
310	420											7166	9710		
317	430											7337	9942		
325	440											7508	10173		
332	450											7681	10409		
339	460											7852	10640		
347	470											8023	10871		
354	480											8194	11102		
362	490											8364	11334		
369	500														