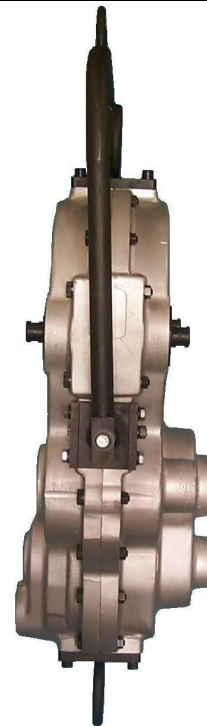


Model SWE8300C Torque Multiplier



WARNINGS

- DO NOT EXCEED RATED CAPACITY.
- KEEP CLEAR OF ROTATING PARTS.
- WEAR SAFETY GLASSES and proper personal protective equipment (PPE).
- Make sure reaction pins are fully engaged. (see section 2.1 for details)
- Hold input handle of driving tool firmly at all times torque is applied.
- Keep proper footing and balance at all times. This allows better control of the tool in unexpected situations.
- The model SWE8300C Torque Multiplier does not contain an anti-backlash device (brakes or ratchet). This unit **should only** be used with a Model 8202A Air Torque Multiplier, or with a Model 8202-290A Mechanical Torque Multiplier, which has an anti-backlash ratchet.



1. DESCRIPTION AND SPECIFICATIONS

The Sweeney SWE8300C Torque Multiplier provides maximum power for breakaway and maximum speed for run-off of large threaded assemblies. Both operate most effectively with Sweeney designed anchors and sockets that always “turn the nut” and hold the “bolt”.

Design features of SWE8300C includes:

- Splined output for maximum strength.
- 360° continuous rotation both directions.

- Manual or pneumatic operation.
- Adjustable 360° protractor.

- 1.1 The SWE8300C Torque Multiplier uses a combination of planetary gears and a triple reduction gear mechanism, providing power-multiplying means for loosening and tightening threaded assemblies that demand high torque values. The SWE8300C is designed with an internal splined drive that connects to sleeve sockets, which are specially designed for each

Model SWE8300C Torque Multiplier

application. Anchor pins are located on top and bottom for versatility of anchoring. An adjustable 360° protractor is attached to the top face of the unit for angle of turn readings.

Approx, Torque Ratio: 42.5: 1
Input Drive: 3/4" (19mm) Sq. Female
Output Drive: Internal Spline 8/16 Pitch, 43 Teeth
Rated Output Capacity: 30,000 lbf-ft (40,674 N-m)
Rotation of Input: Continuous in either direction
Anchor Pins: 2-Each side, 1" (.25 mm) Dia X 1" Lg.
Center Distance: 10.50" (266.7 mm) (Between Pins)
Dimensions: 32.75" (832mm) L x 20.50" (521mm) W x 9.875" (251mm) H
Net Weight: 195 lb. (88.5kg)

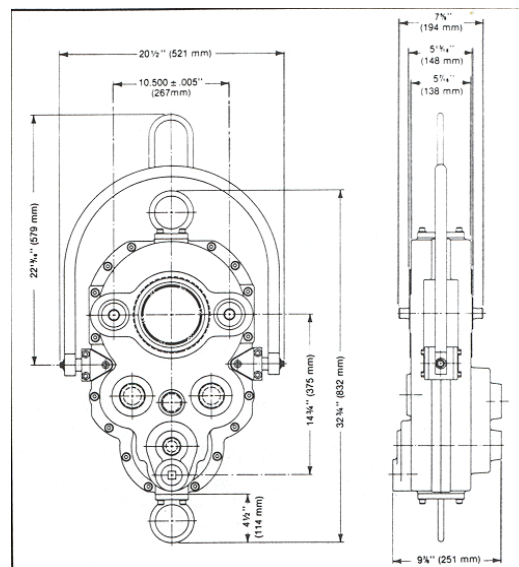
2. OPERATION

- 2.1 When using the SWE8300C Torque Multiplier, a method must be provided to react the torque being applied to the threaded element. It is preferable to locate this anchor near the threaded element. Whatever means of anchoring is employed, the anchor must mate to the anchor pins of the multiplier.
The anchor must be solid with minimum deflection and designed to be perpendicular to the axis of the threaded element to insure proper alignment of the torque multiplier. The anchor should be properly designed for each application. Consult Sweeney for design information.
- 2.2 After attaching the torque multiplier, check for proper engagement of anchor pins and sleeve socket.
- 2.3 To prevent accidental torque wind-up release, additional torque multipliers must be piggybacked to the input of the SWE8300C. This will also lesson the effort to obtain high output torque. Models 8202-290A Mechanical Torque Multiplier and 8202A Air Torque Multiplier provides two speeds which result in two distinct torque ratios and eliminate the need to react the input torque. Only one mechanic is required when these tools are used with the SWE8300C Torque Multiplier.

NOTE: The high and low outputs of the 8202A rotate opposite of each other. Always check the rotation of the output to be used before mounting.

3. MAINTENANCE and TROUBLESHOOTING

- 3.1 Care should be exercised when using the tool to protect it from external damage and corrosive environments.
- 3.2 Each torque multiplier is adequately lubricated at the factory for normal service between overhauls and/or calibration cycles. No additional lubrication is required during field service. We recommend rotating the input several times before each use to ensure uniform grease distribution and use of the tool in varying positions.
- 3.3 Inspect the torque multiplier and related tools at each use for cracks in the housing castings. These parts are subject to a high degree of stress when in use, no attempt should be made to repair cracks or any damage which has seriously weakened the structural integrity of the parts. Return to factory or authorized repair center for replacement parts. Minor scratches, burns, or nicks may be removed by a fine cut file or stone.
- 3.4 A unit in need of repair, overhaul or calibration MUST be returned to the factory. Disassembly and inspection of internal parts are recommended once a year. Any unit disassembled will require recalibration. DO NOT disassemble the unit in the field. Consult Sweeney Repair Department at 1-715-627-5519. For Europe, Middle East and Africa, please contact Turbine Tools Ltd, phone number +44 01342716600. For those in the Far East and Japan, contact Yokohama Engineering Service, phone +81 0459292577.



Model SWE8300C Torque Multiplier

NOTE:

1. FASTENERS:

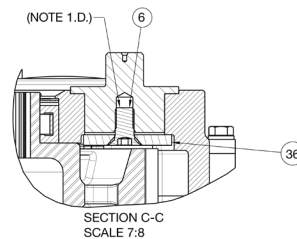
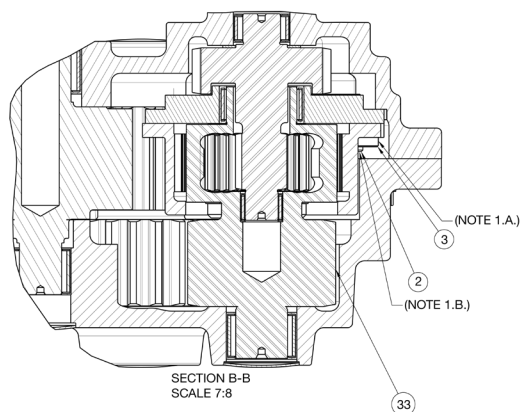
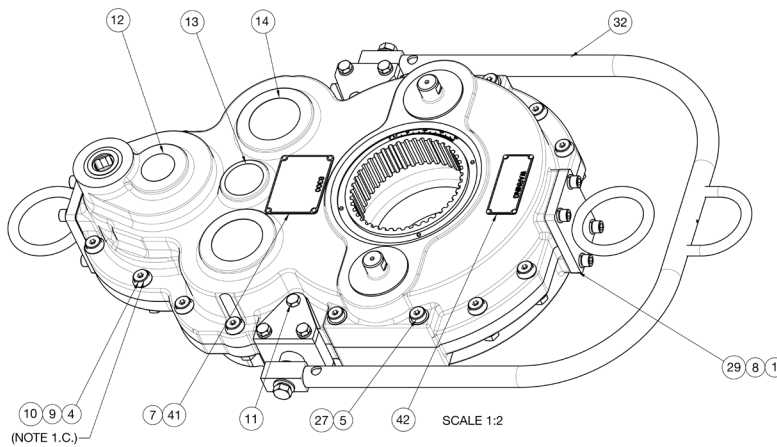
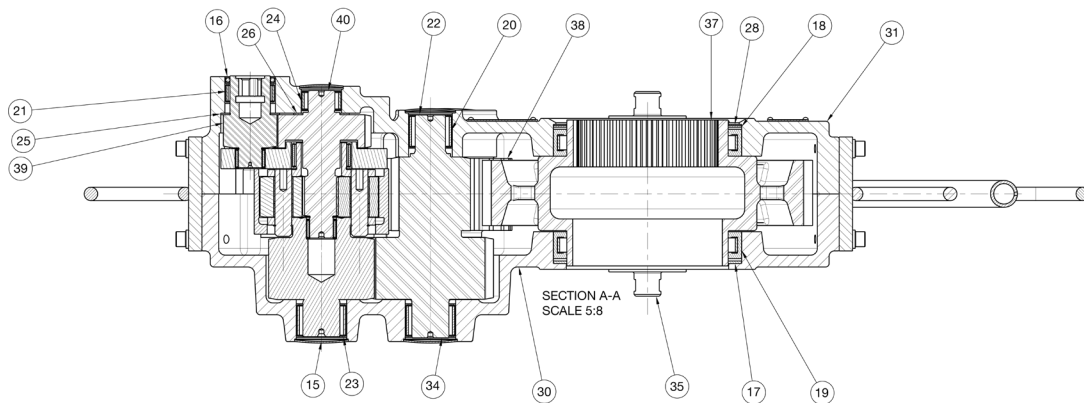
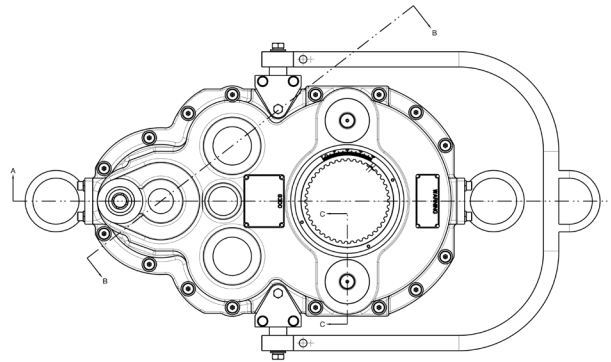
A. TORQUE TO 18 LB:FT - USE BLUE LOCTITE

B. TORQUE TO 45 LB:FT - USE BLUE LOCTITE

C. TORQUE TO 40 LB:FT

D. USE GREEN LOCTITE (QTY 4)

2. LUBRICATE ALL BEARINGS & GEARS - USE LITHIUM BASED GREASE



Model SWE8300C Torque Multiplier

ITEM	PART NO.	DESCRIPTION	QTY.
1	001AE0037351	Socket Head Cap Screw 3/8" - 16 UNC x 1-1/4" Long	8
2	001AE0039241	Socket Head Cap Screw 3/8"-16UNC x 1-1/2" Long	4
3	001BE0044870	Shoulder Screw 3/8 X 1 Long X 5/16-18 UNC	6
4	001BE0047632	Shoulder Screw 1/2" X 1-1/2" Long X 3/8"-16 UNC	12
5	001BE0047633	Shoulder Screw 1/2" X 3" Long X 3/8"-16 UNC	4
6	001BT0044833	Screw- Hex Socket CSK, 1/2-13X1.000, STL Alloy, BLOX	4
7	001GD0047735	Drive Screw - #4 X 1/4" Long	8
8	001HC0047791	Washer - Spring/Lock - 3/8" Regular	10
9	001HF0047069	Washer, 3/8" Flat, 13/32"I.D. X 7/8"O.D. X .125"T	16
10	001NC0047746	Hex Nut - 3/8"-16 UNC	18
11	001RG0047677	Screw-HHCS, Hex, 3/8-16X3.500, STL/Grade #2, Plain	2
12	003AK0047395	Plug, Expansion 1-5/8	1
13	003AK0047396	Plug, Expansion 1-7/8	3
14	003AK0047403	Plug, Expansion, 2-1/2	2
15	003AK0047404	Plug, Expansion 2"	2
16	012JB0048040	Seal, Bearing	1
17	012JB0048045	Seal, Bearing 7" O.D. X 6" I.D. X 1/16" Thick	2
18	012JB0048045	Seal, Bearing 7" O.D. X 6" I.D. X 1/16" Thick	1
19	023AL0046953	Bearing, Needle Outer Race Only	2
20	023AL0046954	Bearing, Needle Outer Race Only	3
21	023AL0046962	Bearing, Needle Outer Race Only	1
22	023AL0046970	Bearing, Needle Outer Race Only	2
23	023AL0046971	Bearing, Needle Outer Race Only	2
24	023AL0046972	Bearing, Needle Outer Race Only	1
25	023BD0046987	Washer, Thrust	1
26	023BD0046989	Washer, Thrust	1
27	023BD0047000	Washer, Thrust	16
28	SWE810724	Scale Assembly	2
29	SWE8111-30	Eye Lift	2
30	SWE8300-10	Housing Lower	1
31	SWE8300-11	Housing Upper	1
32	SWE8300-15	Ass'y Sling	1
33	SWE8300-20	Sub Ass'y Planet	1
34	SWE8300-30	Shaft Pinon Gear	1
35	SWE8300-40	Pin Anchor	4
36	SWE8300-41	Plate Pressure	4
37	SWE8300-50	Gear Output	1
38	SWE8300-60	Gear Idler	2
39	SWE8300-70	Pinion Input	1
40	SWE8300-80	Gear Input	1
41	SWE8300-201	Plate Name(30 000LBF-FT)8300	1
42	SWE8300-202	Plate Warning	1

Model SWE8300C Torque Multiplier

APPENDIX 1: CE DECLARATION OF CONFORMITY

We hereby certify that the above mentioned equipment complies with all the relevant provisions of the Directive listed below and the National Laws and Regulations adopting the Directive When used with: **SWE8202A Air Torque Multiplier or SWE8202-290 Mechanical Torque Multiplier**

The certification applies to the following Directive:
2006/42/EC “Machinery Directive”

The equipment

- There is no EC type examination applicable to the type of equipment at this time.
- There are no national or international technical standards wholly applicable to this type of equipment.
- There are no transposed, harmonised standards wholly applicable to this equipment at this time. The equipment complies with the essential safety requirements (EHSR's) described in Annex I of the directive 2006/42/EC.
- The manufacturer's quality assurance system is to ISO 9001 (approval cert no. LRQ 10005510).
- A technical file relating to this machinery and proving conformity to the above mentioned directive is maintained by Hydratight.
- Technical specifications and design standards used are those developed by Hydratight and are identified in the technical file described above.

APPENDIX 2: ENVIRONMENTAL STATEMENT



Enerpac minimizes, where technically possible and economically viable, the impacts of company activities on the environment. This is particularly relevant to the recycling and safe disposal of packaging, oils and metallic component parts at the end of their useful life. As part of Enerpac's commitment to good environmental practice we respectfully urge our customers to consider such matters in their use of Hydratight bolt tightening equipment.

Hydraulic bolt tightening equipment is typically metals that can be readily recycled. The remaining non-metallic seals are not readily recycled. Further advice on recycling and safe disposal methods can be obtained from local environmental agencies.