

## Model 8200 Torque Multiplier



### 1. DESCRIPTION AND SPECIFICATIONS

- 1.1 The 8200 Torque Multiplier is a double reduction gear mechanism providing power multiplying means for loosening and tightening threaded assemblies that demand high torque values. The 8200 is designed with an internal splined drive that connects to sleeve sockets which are specially designed for each application. An adjustable 360° protractor is attached to both faces of the unit for angle of turn readings.

Power ratio	11.1 : 1
Input Drive	¾" (19mm) sq. Female
Rated Input Capacity	1,081 lbf-ft (1,466 N-m)
Output Drive	Internal Spline 8/16 pitch, 43 teeth
Rated Output Capacity	144,000 lbf-in; 12,000 lbf-ft (16,270 N-m)
Rotation of Input	Continuous rotation in either direction
Anchor Pins	1" (25.4 mm) dia., 1" (25.4mm) L, 10 ½" (266.7mm) centers
Net Wrench Weight	54 lbs. (25.4 kg.)
Dimensions	17-29/32" (455mm) L x 12 ½" (318mm) W x 7-17/32" (191mm) H
Accuracy	±5% (from 10-100% of full scale)

### 2. CAUTIONS AND WARNINGS

- 2.1 Do not exceed rated output capacity

### 3. OPERATION

- 3.1 When using the 8200 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 the Hydratight Sweeney Division for design information.

- 3.2 After attaching the torque multiplier, check for proper engagement of anchor pins and sleeve socket.
- 3.3 Additional torque multipliers may be piggybacked to the input of the 8200 to lessen the effort necessary to obtain high output torque. Model 8202 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 8200 Torque Multiplier.

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

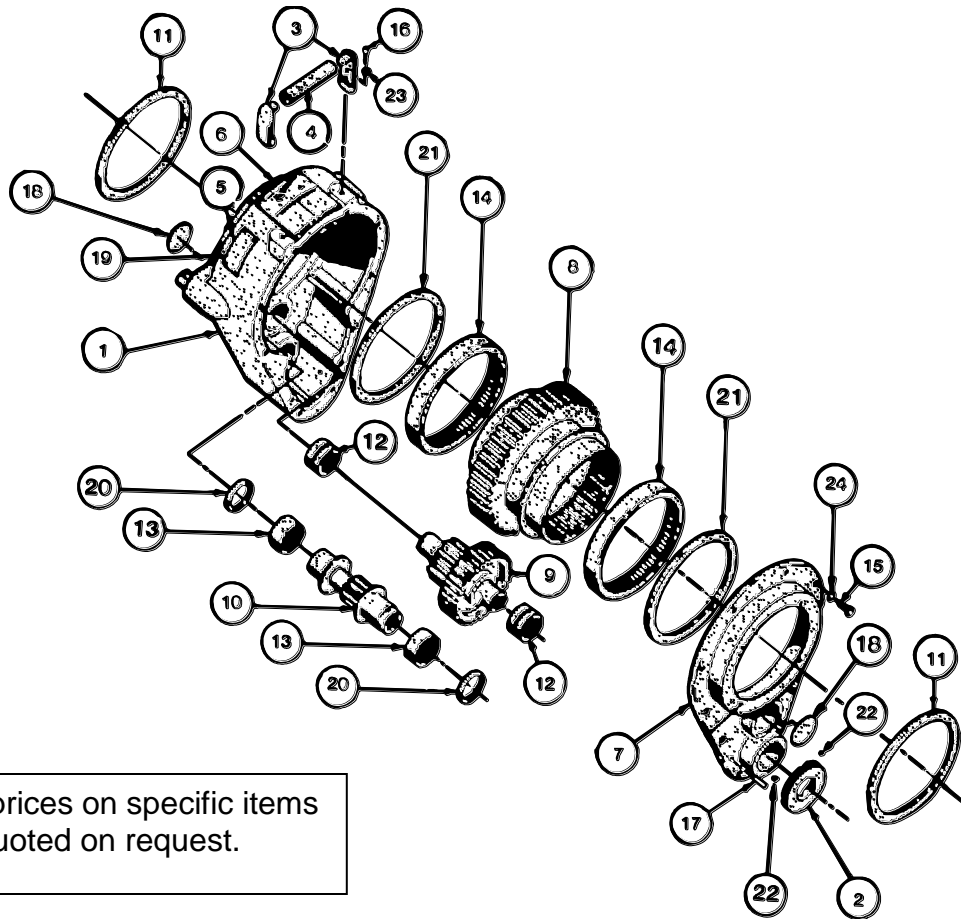
### 4. MAINTENANCE

- 4.1 Care should be exercised when using the tool to protect it from external damage and corrosive environments.
- 4.2 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 that has seriously weakened the structural integrity of the part. Contact the factory for replacement parts. A fine cut file or stone may remove minor scratches, burrs, or nicks.
- 4.3 Disassembly and inspection of internal parts is recommended once a year. Worn or damaged parts should be replaced with original factory parts only. Lubricate with Premium #2 Lithium Base, Ball and Roller Bearing Grease. Each unit is certified for accuracy at the factory before shipment. Recertification is advised after disassembly and inspection or parts replacement (if required).

### 5. CERTIFICATION

- 5.1 This torque multiplier, when used in conjunction with the 8202A Air Torque Multiplier or the 8202-290A Mechanical Torque Multiplier, conforms with the requirements for CE Marking.

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Note: Current prices on specific items will be quoted on request.

ITEM	PART NUMBER	DESCRIPTION	QTY
1	8100-9	HOUSING, WITH ANCHOR PINS	1
2	301-130	COLLAR, KNURLED	1
3	810140	HANDLE	2
4	810141	TUBE	1
5	810203	NAMEPLATE	1
6	820101	NAMEPLATE	1
7	81022	COVER	1
8	81050	GEAR, OUTPUT	1
9	82068	GEAR, CLUSTER	1
10	82070	PINION, INPUT	1
11	810724	ASSEMBLY, SCALE	2
12	904175	BEARING	2

ITEM	Part Number	DESCRIPTION	QTY
13	904036	BEARING	2
14	904093	BEARING	2
15	A000153042004	SCREW, HEX HEAD CAP	10
16	A000151816001	SCREW, SOCKET HEAD CAP	2
17	A000141026001	PIN, DOWEL	2
18	924019	PLUG, EXPANSION	2
19	A000158977001	SCREW, DRIVE	8
20	942064	SEAL, BEARING	2
21	942289	WASHER, FELT	2
22	A000155153001	SCREW, CUP POINT SET	2
23	A000261247001	WASHER, LOCK HIGH COLLAR	2
24	A000261249001	WASHER, LOCK	10