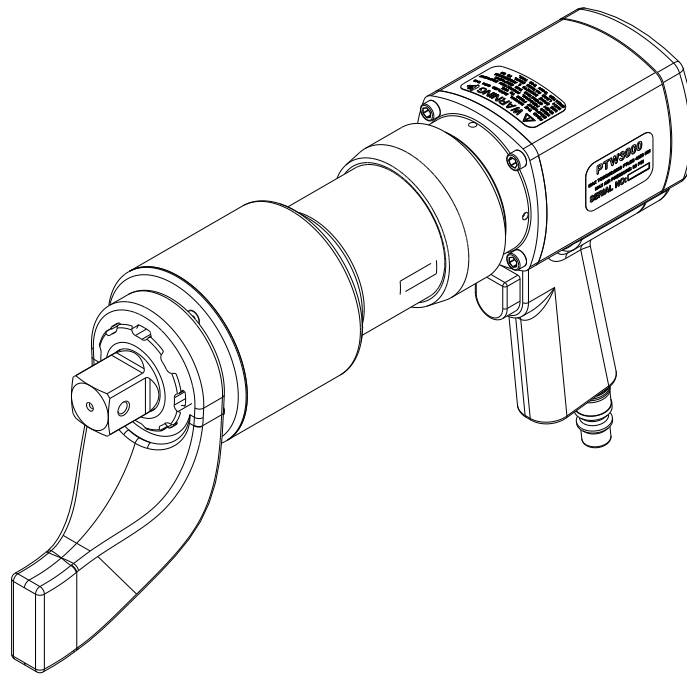


Document Number	Document Revision	Document Revision Date	Product Date Code Beginning With
L4083	F	04/2017	A

**NOTICE:**

Enerpac recommends that all parts included in a service assembly or repair kit be installed to ensure optimum performance of the repaired product.

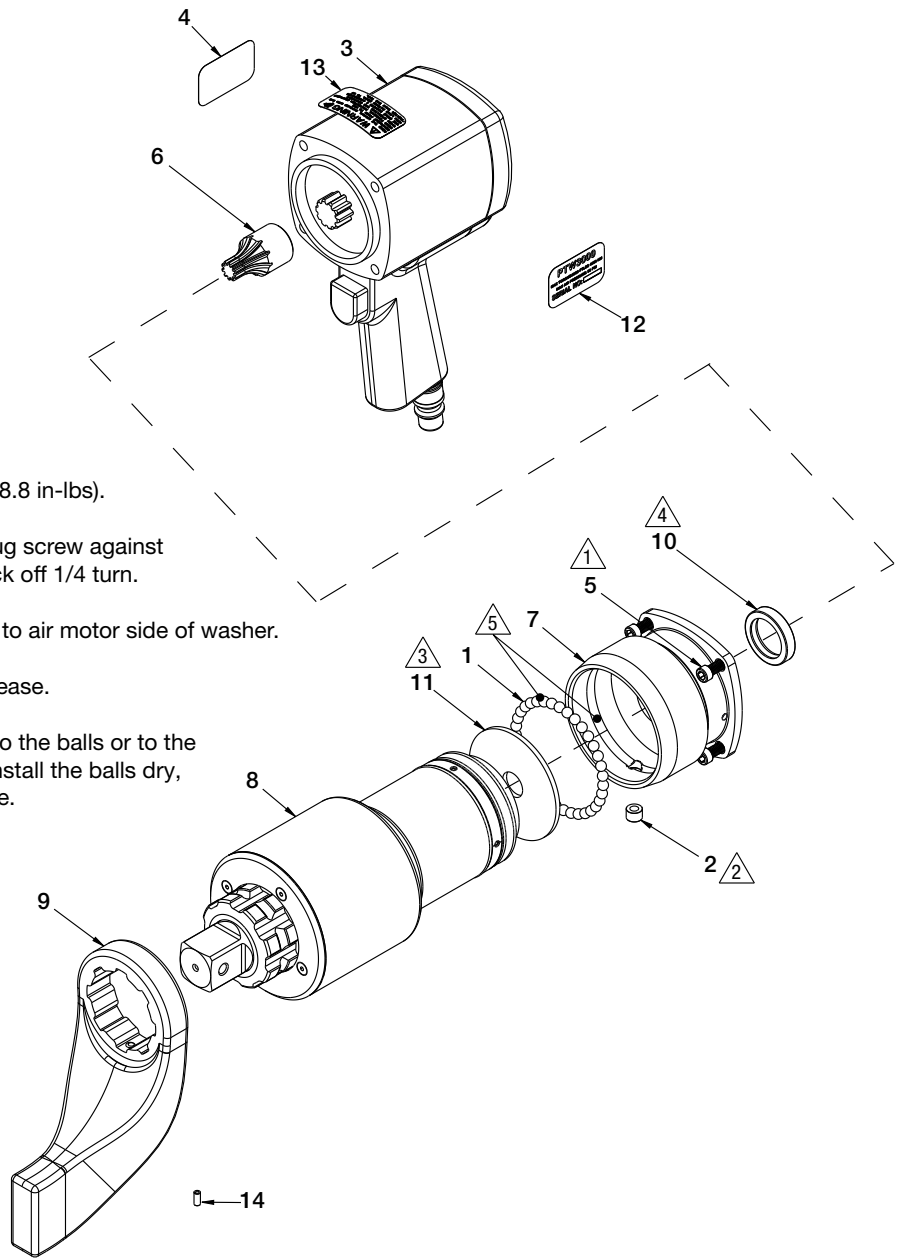


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**⚠ WARNING** Disconnect tool from air supply before beginning any maintenance or repairs. Appropriate shop safety procedures are to be followed during disassembly and reassembly to minimize any possibility of injury.

**Fig. 1, Main Assembly**



**Notes:**

- 1 Torque to 8,0 to 8,9 Nm (70.8 - 78.8 in-lbs).
- 2 Apply Loctite 242 to threads, snug screw against ball race between balls, then back off 1/4 turn.
- 3 Apply a thin coat of Moly grease to air motor side of washer.
- 4 Fill cavity of seal lip with Moly grease.
- 5 **Note:** DO NOT apply lubricants to the balls or to the ball groove during reassembly. Install the balls dry, without applying any oil or grease.

**Repair Parts List, Fig. 1**

**L4083**

Item	Part Number	Qty.	Description	Item	Part Number	Qty.	Description
1	☆ B1007016	35	Ball, 1/4" Diameter	9	* ◆ DD5340900SR	1	Reaction Arm (standard)
2	☆ BF3804027A	1	Set Screw, Cup Point	10	☆ DD5344476	1	Seal, Radial Lip
3	⊕ (See Fig. 2)	1	Assembly, Air Motor	11	☆ DD5356108	1	Washer, Delrin
4	⊕ DD4500026	1	Decal, Brand PTW	12	⊕ DD5385026	1	Decal, PTW3000
5	☆ DD4608028	4	SHCS, M6 x 1 - 14, SS	13	⊕ DD5496026	1	Decal, Warning
6	DD5168229SR	1	Pinion, Input, PTW	14	* ◆ DD5448600SR	1	Set Screw, Reaction Arm
7	DD5169101SR	1	Plate, Adaptor PTW	-	⊛ DD5587600SR	A/R	Grease, Moly, 16 oz, 454 g (A/R = Order as required)
8	◆ (See Fig. 3)	1	Assembly, Gear Box				

◆ Included in service assembly TW3000RSR, Gearbox Assembly with Reaction Arm.

\* Included in service assembly RATWS, Standard Reaction Arm.

☆ Included in service assembly DD5356108SR, Swivel Hardware Kit.

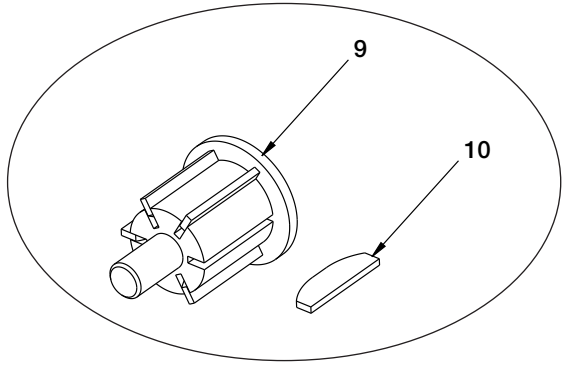
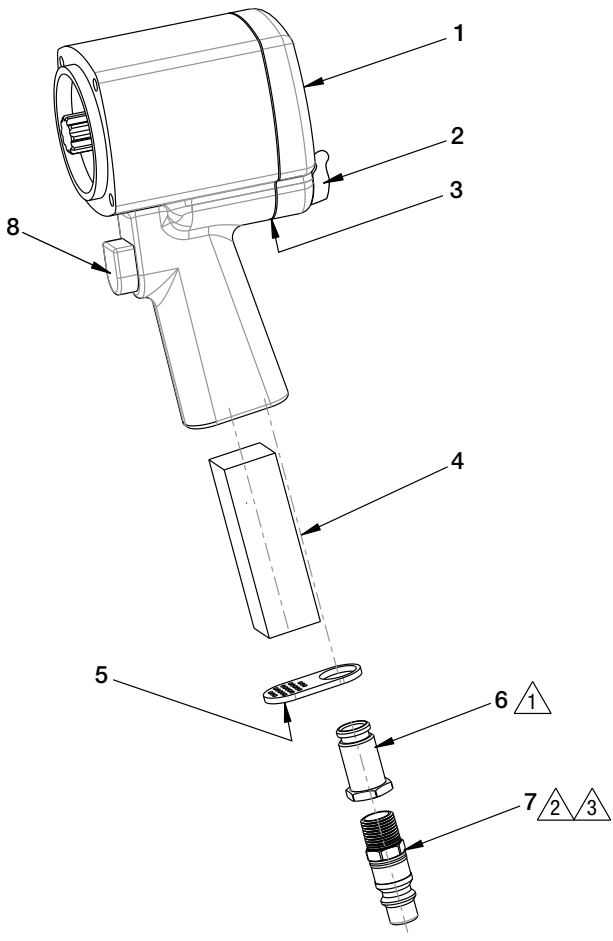
⊕ Included in service assembly DD3237900SR, Air Motor Assembly Kit.

⊛ Apply Moly grease as described in Fig. 1.

See notes and .

**Note:** Items included in service assemblies are not sold separately.

**Fig. 2, Air Motor Assembly**

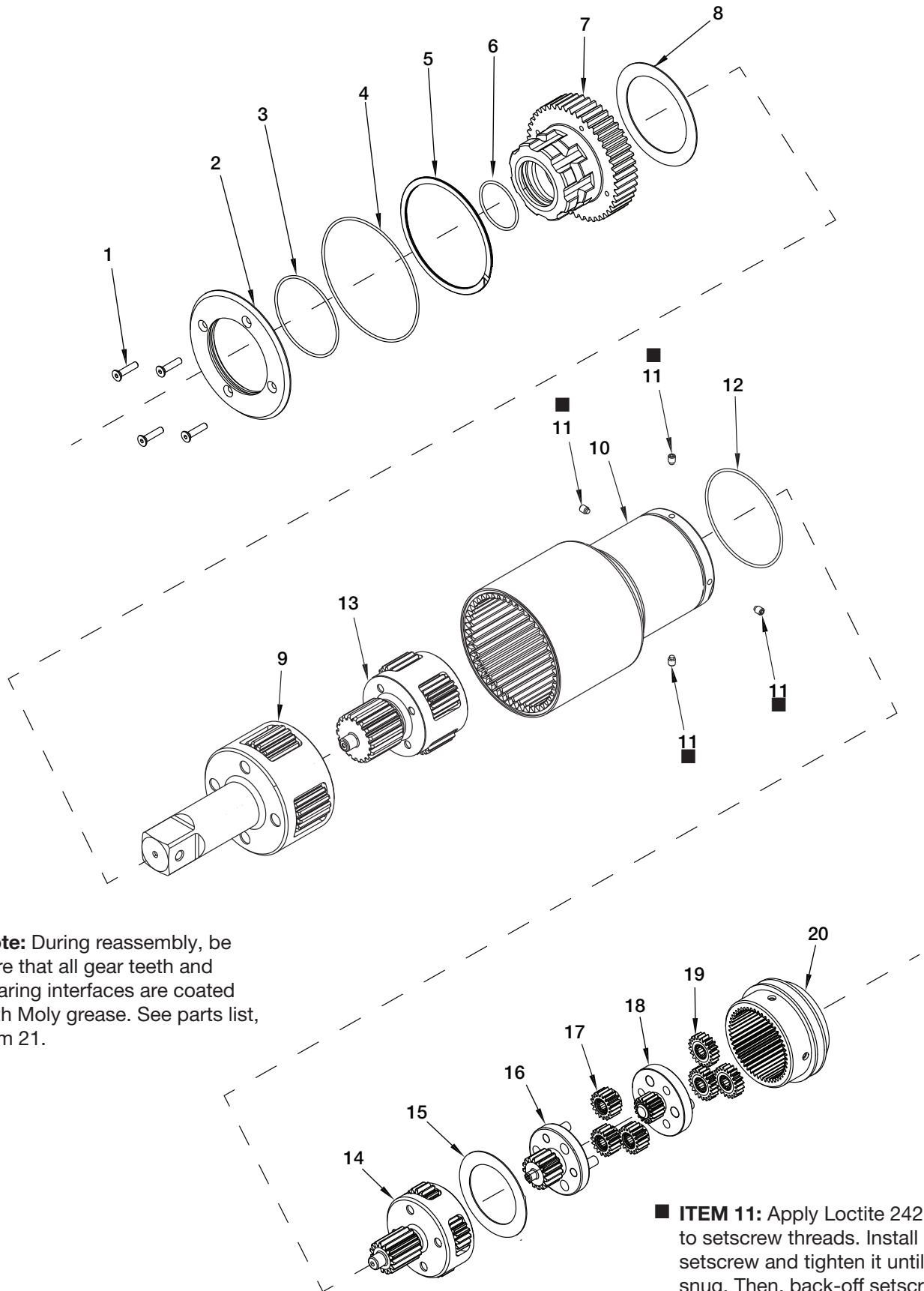


**Notes:**

- ① Install nut (item 6) so that it is snug against exhaust deflector plate (item 5). Torque to 4,1 to 6,7 Nm (3-5 ft-lbs). Note: Plate may crack if nut is tightened excessively.
- ② Apply Loctite 545 to threads of coupling (item 7).
- ③ Torque coupling (item 7) to 33,9 to 61,0 Nm (25 - 45 ft-lbs) while holding nut (item 6) with a wrench, to prevent it from turning.

Repair Parts List, Fig. 2				L4083
Item	Part Number	Qty.	Description	
1	+ DD3136259	1	Air Motor	
2	DD5858147SR	1	Directional Control Knob	
3	DD5914037SR	1	Gasket	
4	+ DD3236116SR	1	Foam, Muffler - Air Motor	
5	(included with item 1)	1	Exhaust Deflector Plate	
6	(included with item 1)	1	Nut, Air Inlet	
7	+ DD4847095SR	1	Coupling, Male 1/2" x 3/8" NPT	
8	DD5855144SR	1	Trigger Kit (includes roll pin)	
9	DD5472600SR	1	Replacement Rotor for Air Motor	
10	DD5820600SR	1	Replacement Vanes for Air Motor (set of 6)	
11	❖ DD5859016SR	1	Detent Service Kit (parts not shown)	
+ Included in service assembly DD3237900SR, Air Motor Assembly Kit. ❖ Detent service kit includes ball and spring for directional control spool (not shown).				<b>Note:</b> Items included in service assemblies and kits are not sold separately.

**Fig. 3, Gear Box Assembly**



**Note:** During reassembly, be sure that all gear teeth and bearing interfaces are coated with Moly grease. See parts list, item 21.

■ **ITEM 11:** Apply Loctite 242 to setscrew threads. Install setscrew and tighten it until snug. Then, back-off setscrew 1/4 turn.

### Repair Parts List, Fig. 3

**L4083**

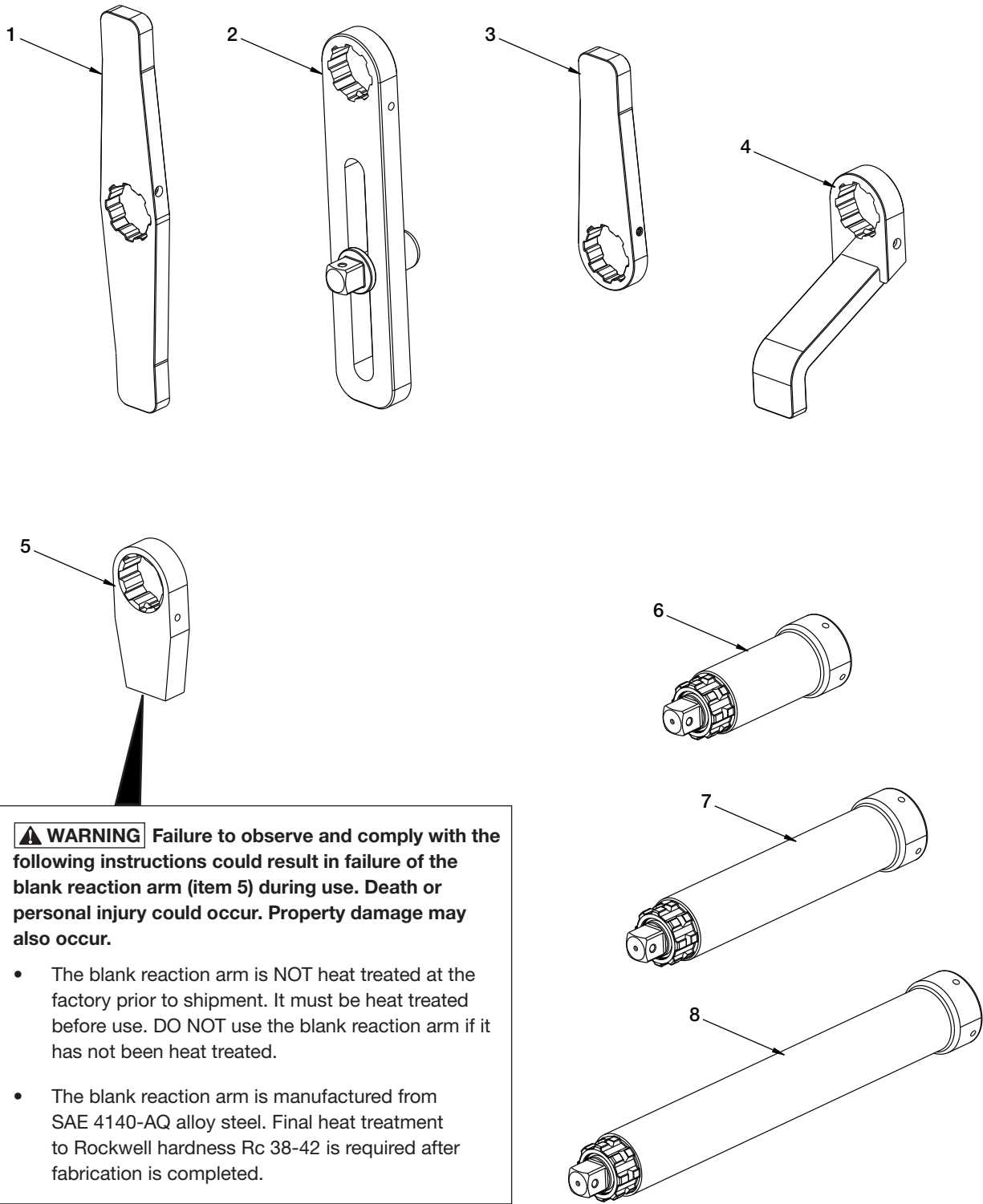
Item	Part Number	Qty.	Description
1	✦★◆ (not sold separately)	4	Cap Screw, Socket Head Flat
2	★◆ DD5460600SR	1	Housing Cap, TW3000
3	✦★◆ (not sold separately)	1	O-Ring, Housing Cap (small)
4	✦★◆ (not sold separately)	1	O-Ring, Housing Cap (large)
5	✦★◆ (not sold separately)	1	Retaining Ring
6	✦★◆ (not sold separately)	1	O-Ring, Housing Head
7	★◆ DD5461600SR	1	Housing Head, TW3000
8	✦★◆ (not sold separately)	1	Thrust Washer
9	★◆ DD5463600SR	1	Assembly, Drive Stage, TW3000
10	★◆ DD5462600SR	1	Gear Housing, TW3000
11	✦★◆ (not sold separately)	4	Set Screw
12	✦★◆ (not sold separately)	1	O-Ring, Housing
13	★◆ DD5470600SR	1	Gear Carrier, Fourth Stage, TW3000
14	★◆ DD5469600SR	1	Gear Carrier, Third Stage, TW3000
15	✦★◆ (not sold separately)	1	Thrust Washer, High Speed
16	★◆ DD5467600SR	1	Gear Carrier, Second Stage, TW3000
17	✦★◆ DD5468600SR	1	Planetary Gears, Second Stage, TW3000
18	★◆ DD5465600SR	1	Gear Carrier, First Stage, TW3000
19	✦★◆ DD5466600SR	1	Planetary Gears, First Stage, TW3000
20	★◆ DD5464600SR	1	Ring Gear, TW3000
21	✦ DD5587600SR	A/R	Grease, Moly, 16 oz, 454 g

- ✦ Included in MKTW3000K Maintenance Kit.
- ★ Included in service assembly TW3000SR, Replacement Gearbox Assembly.
- ◆ Included in service assembly TW3000RSR, Replacement Gearbox Assembly with Reaction Arm.  
(See Figure 1 for reaction arm and set screw)
- ✦ Item includes set of three planetary gears with bearings.
- ✦ During reassembly, be sure that all gear teeth and bearing interfaces are coated with Moly grease.

A/R = Order as required.

**Note:** Items included in service assemblies are not sold separately.

**Fig. 4A, Accessories**



**⚠ WARNING** Failure to observe and comply with the following instructions could result in failure of the blank reaction arm (item 5) during use. Death or personal injury could occur. Property damage may also occur.

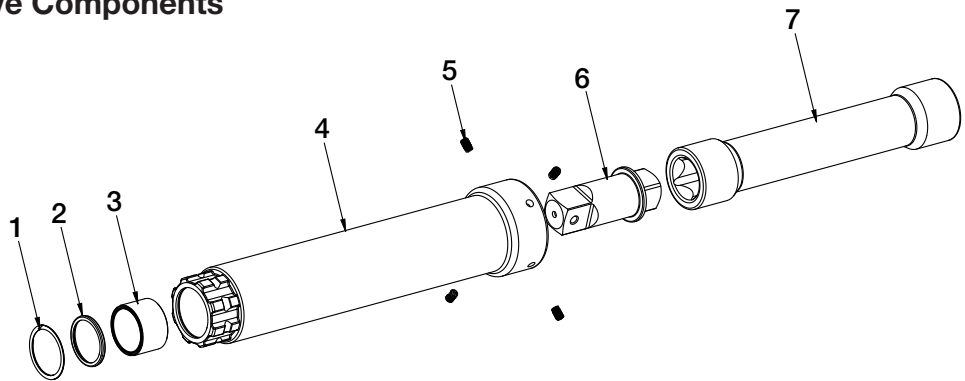
- The blank reaction arm is NOT heat treated at the factory prior to shipment. It must be heat treated before use. DO NOT use the blank reaction arm if it has not been heat treated.
- The blank reaction arm is manufactured from SAE 4140-AQ alloy steel. Final heat treatment to Rockwell hardness Rc 38-42 is required after fabrication is completed.

**NOTICE:** See Fig. 4B for service parts for items 6, 7 and 8.

Repair Parts List, Fig. 4A				L4083
Item	Part Number	Qty.	Description	
1	DSATWS	1	Reaction Arm, Straight, Double	
		1	Screw, 1/4 - 28 x 2" long	
		1	Nylon Hex Nut, 1/4 - 28	
2	SLRATWS	1	Reaction Arm, Sliding	
		1	Screw, 1/4 - 28 x 2 - 1/4" long	
		1	Nylon Hex Nut, 1/4 - 28	
3	SRATWS	1	Reaction Arm, Straight	
		1	Screw, 1/4 - 28 x 2" long	
		1	Nylon Hex Nut, 1/4 - 28	
4	ERATWS	1	Reaction Arm, Extended	
		1	Screw, 1/4 - 28 x 2" long	
		1	Nylon Hex Nut, 1/4 - 28	
5	BLTWS	1	Reaction Arm, Blank	
		1	Screw, 1/4 - 28 x 2" long	
		1	Nylon Hex Nut, 1/4 - 28	
6	ED6TWS	1	Extended Drive, 6" long (See Fig. 4B)	
		1	Screw, 1/4 - 28 x 3/8" long	
7	ED12TWS	1	Extended Drive, 12" long (See Fig. 4B)	
		1	Screw, 1/4 - 28 x 3/8" long	
8	ED18TWS	1	Extended Drive, 18" long (See Fig. 4B)	
		1	Screw, 1/4 - 28 x 3/8" long	

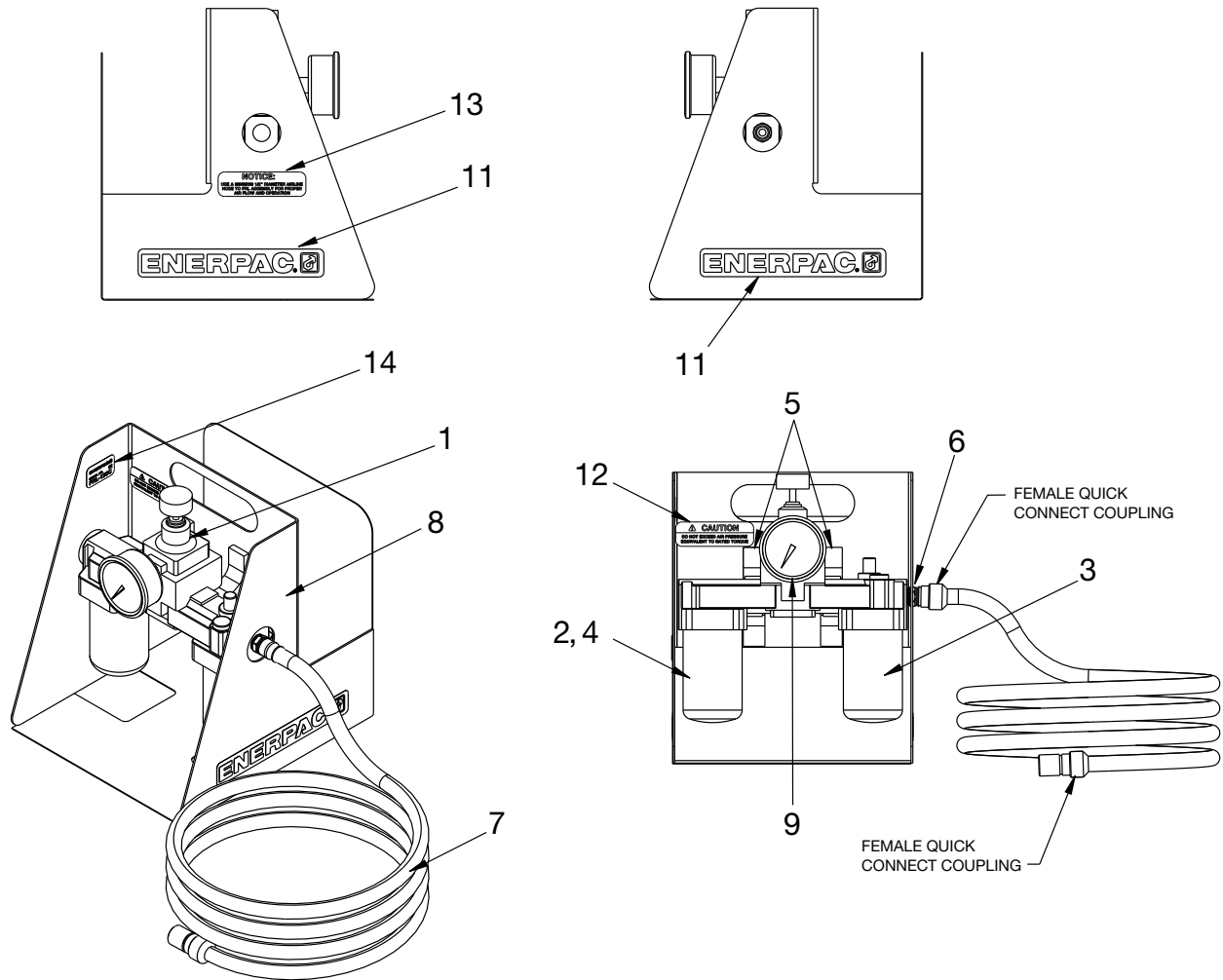
**NOTICE:** Mounting hardware not shown. See Figure 1 for standard reaction arm.

Fig. 4B, Extended Drive Components



Repair Parts List, Fig. 4B				L4083	
Item	Drive Model / Part Number			Qty.	Description
	ED6TWS	ED12TWS	ED18TWS		
1	DD6632249SR	DD6632249SR	DD6632249SR	1	Snap Ring
2	DD6633503SR	DD6633503SR	DD6633503SR	1	O-Ring
3	DD6636039SR	DD6636039SR	DD6636039SR	1	Bushing
4	DD6621001SR	DD6622001SR	DD6623001SR	1	Housing
5	DD6638027SR	DD6638027SR	DD6638027SR	1	Set Screw (package of four)
6	DD6560229SR	DD6560229SR	DD6560229SR	1	Square Drive
7	DD6626104SR	DD6627104SR	DD6628104SR	1	Drive Extension

**Fig. 5, Filter/Regulator/Lubricator Assembly**



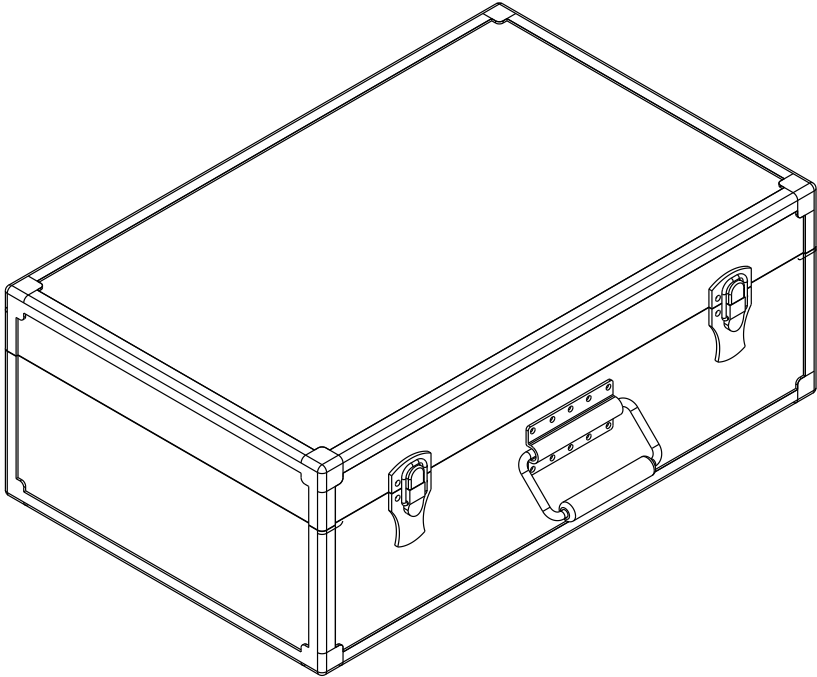
**Repair Parts List, Fig. 5**

**L4083**

Item	Part Number	Qty.	Description
1	DD5528600SR	1	Regulator Assembly
2	DD5530600SR	1	Filter Assembly, Auto Drain
3	DD5529600SR	1	Lubricator Unit
4	DD5531600SR	1	Filter Element
5	DD5532600SR	1	Mounting Bracket
6	DD5767095SR	1	Fitting, 1/2" Male Coupling Plug x 1/2" - 14 NPT
7	DD5534600SR	1	Hose Assembly, 10 Foot (with quick connect couplings)
8	DD5533600SR	1	Enclosure
9	DD5535600SR	1	Air Gauge
10	DD5536600SR	1	Oil, Air System Lubricant (not shown)
11	* DD4870026	2	Decal, Enerpac
12	* DD5543026	1	Decal, Caution, Air Pressure
13	* DD5544026	1	Decal, Notice, Air Flow
14	* DD5578026	1	Decal, Product
* Included as part of FRLDECAL Filter/Regulator/Lubricator Decal Set.			



**Fig. 6, Protective Storage Case**



Repair Parts List, Fig. 6			L4083
Item	Part Number	Qty.	Description
1	DD4726530SR	1	Protective Storage Case, Models PTW3000 and PTW6000





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