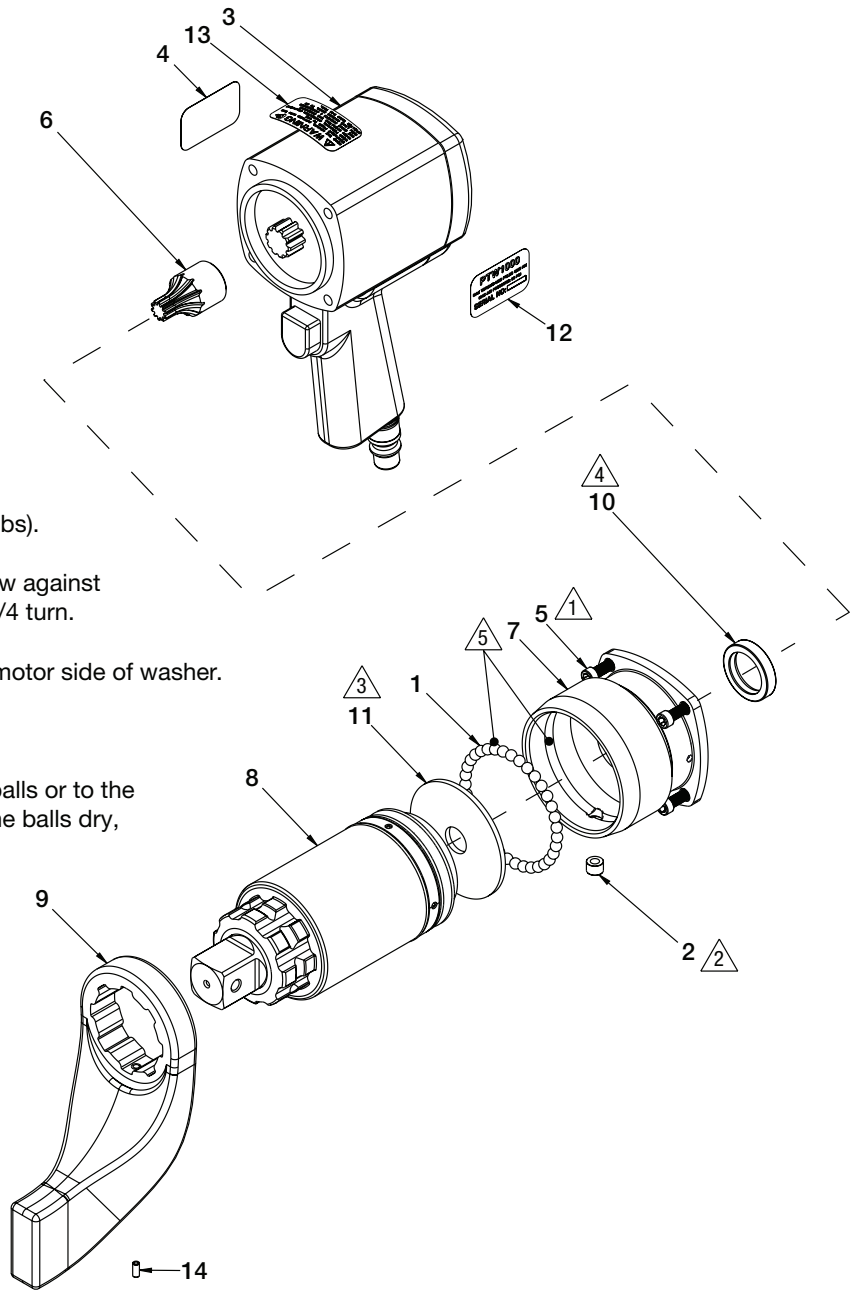


Fig. 1, Main Assembly



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

L4081

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	‡ DD5383026	1	Decal, PTW1000
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 TW1000RSR, Gearbox Assembly with Reaction Arm.

* Included in service assembly RATWS, Standard Reaction Arm.

☆ Included in service assembly DD5356108SR, Swivel Hardware Kit.

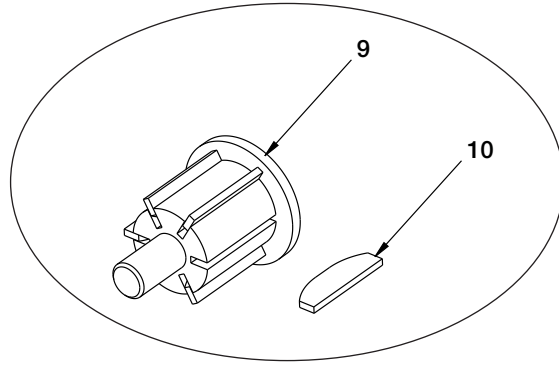
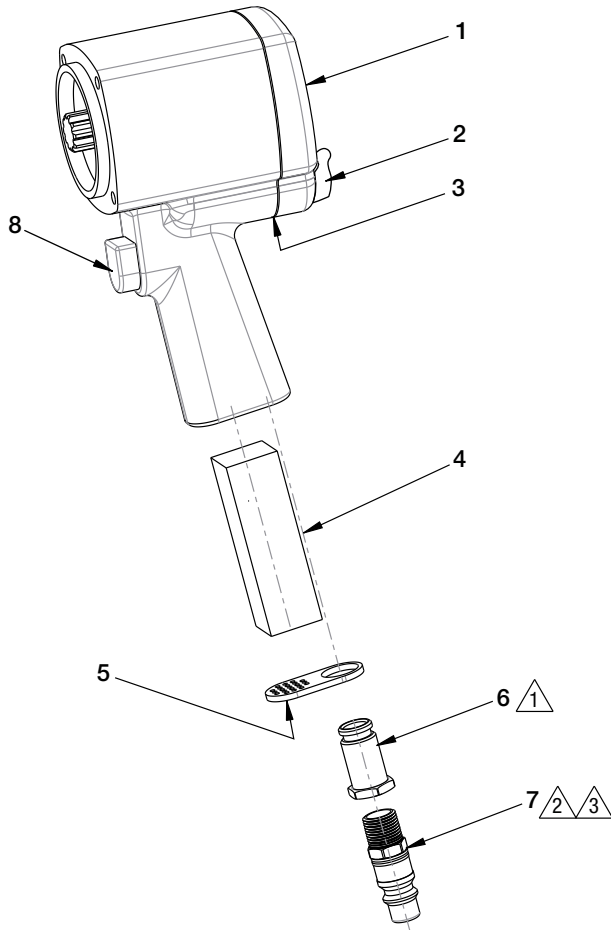
‡ Included in service assembly DD3237900SR, Air Motor Assembly Kit.

⚙ Apply Moly grease as described in Fig. 1.

See notes ③ and ④

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

Fig. 2, Air Motor Assembly

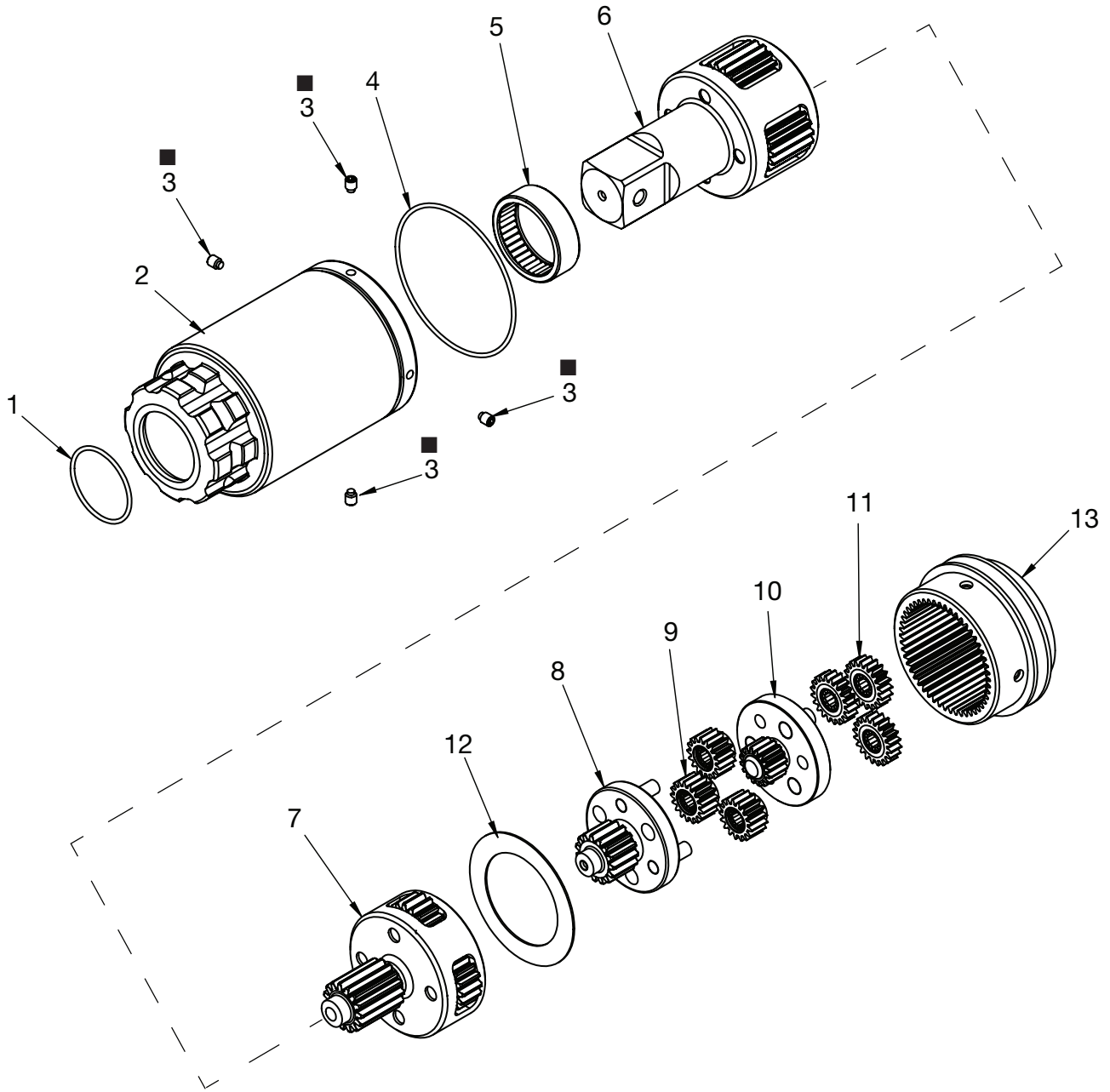


Notes:

- 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				L4081
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).				Note: 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 14.

■ **ITEM 3:** 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

L4081

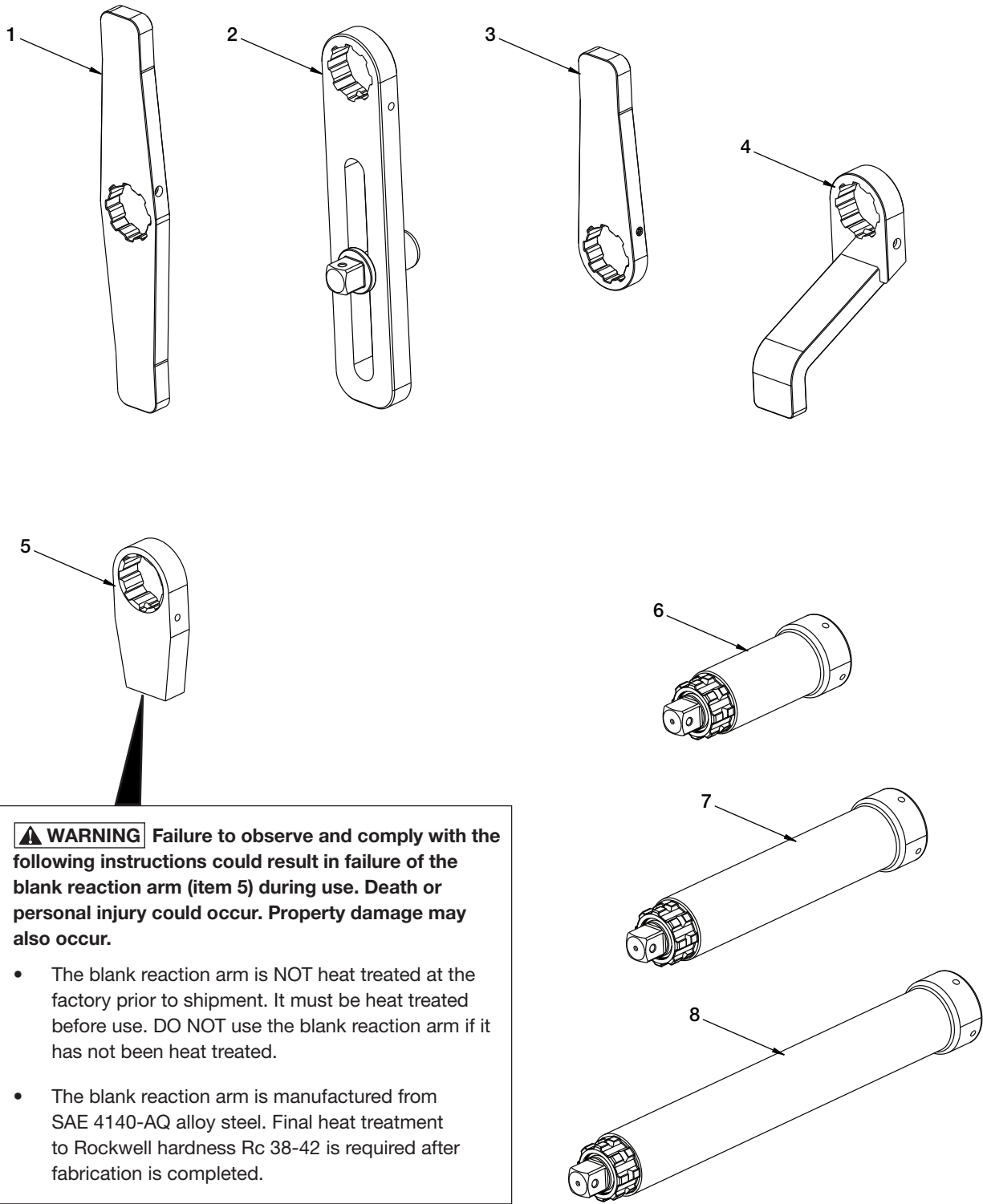
Item	Part Number	Qty.	Description
1	❖★◆ (not sold separately)	1	O-Ring, Small
2	★◆ DD5440600SR	1	Gear Housing, TW1000
3	❖★◆ (not sold separately)	4	Set Screw
4	❖★◆ (not sold separately)	1	O-Ring, Large
5	★◆ DD5458600SR	1	Needle Roller Bearing, Drive Stage, TW1000
6	★◆ DD5441600SR	1	Assembly, Drive Stage, TW1000
7	★◆ DD5447600SR	1	Gear Carrier, Third Stage, TW1000
8	★◆ DD5445600SR	1	Gear Carrier, Second Stage, TW1000
9	❖★◆ DD5446600SR	1	Planetary Gears, Second Stage, TW1000
10	★◆ DD5443600SR	1	Gear Carrier, First Stage, TW1000
11	❖★◆ DD5444600SR	1	Planetary Gears, First Stage, TW1000
12	❖★◆ (not sold separately)	1	Thrust Washer
13	★◆ DD5442600SR	1	Ring Gear, TW1000
14	❖ DD5587600SR	A/R	Grease, Moly, 16 oz, 454 g

- ❖ Included in MKTW1000K Maintenance Kit.
- ★ Included in service assembly TW1000SR, Replacement Gearbox Assembly.
- ◆ Included in service assembly TW1000RSR, Replacement Gearbox Assembly with Reaction Arm.
(See Fig. 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.

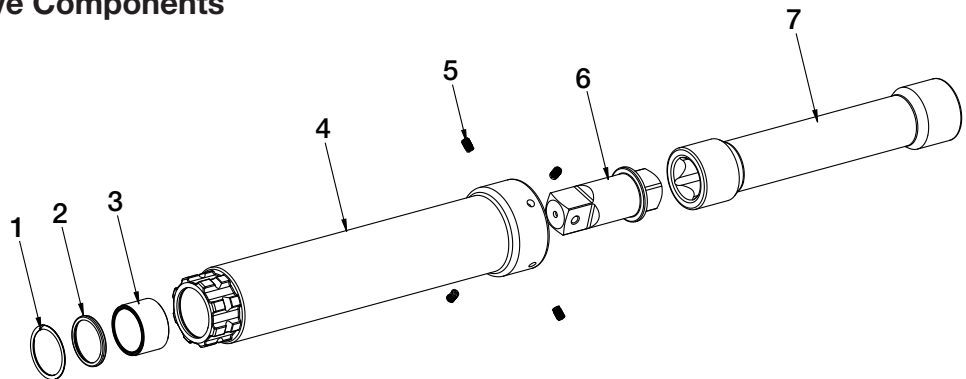
- The blank reaction arm is NOT heat treated at the factory prior to shipment. It must be heat treated before use. DO NOT use the blank reaction arm if it has not been heat treated.
- The blank reaction arm is manufactured from SAE 4140-AQ alloy steel. Final heat treatment to Rockwell hardness Rc 38-42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

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

Repair Parts List, Fig. 4A				L4081
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	

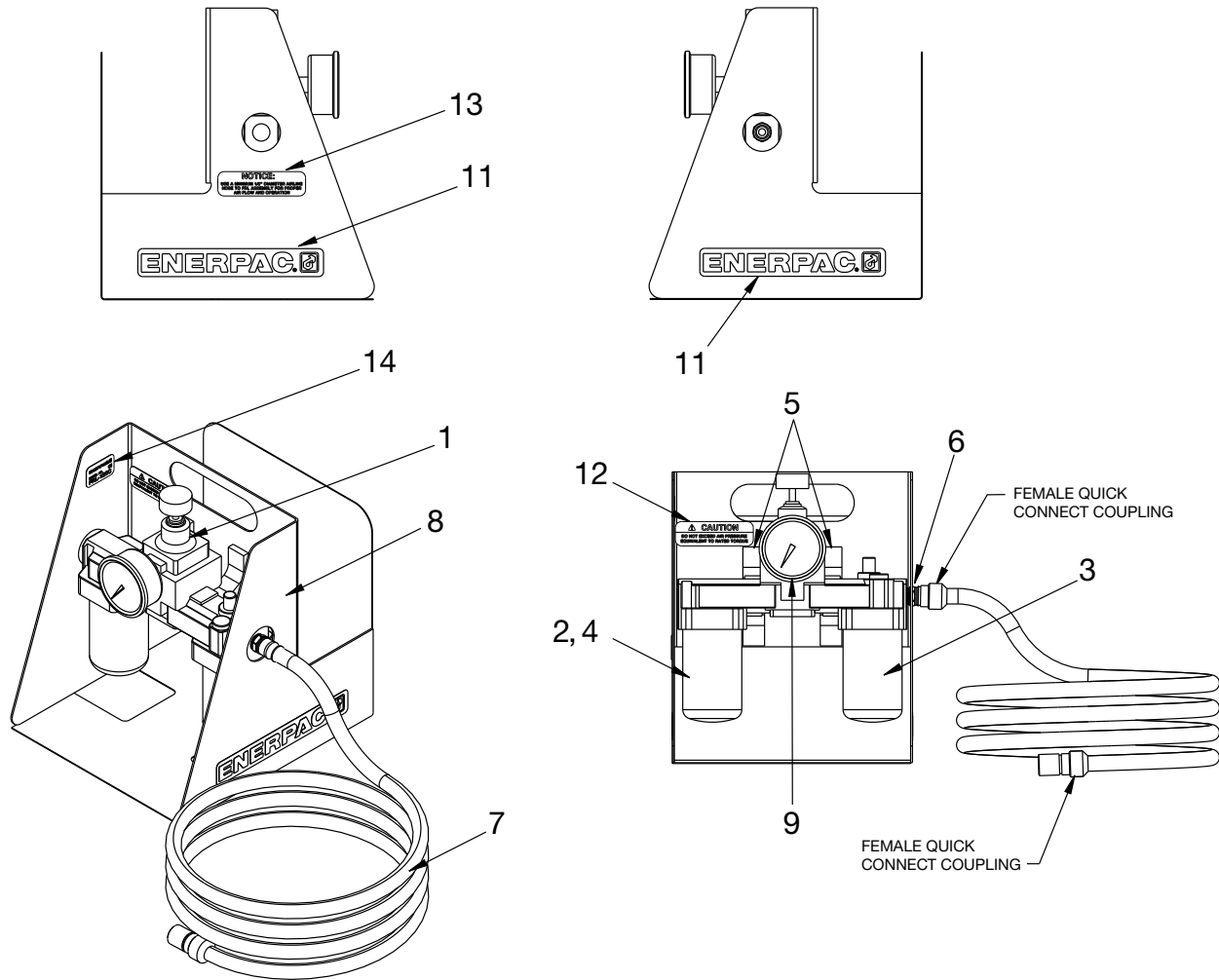
NOTICE: Mounting hardware not shown. See Figure 1 for standard reaction arm.

Fig. 4B, Extended Drive Components



Repair Parts List, Fig. 4B				L4081	
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

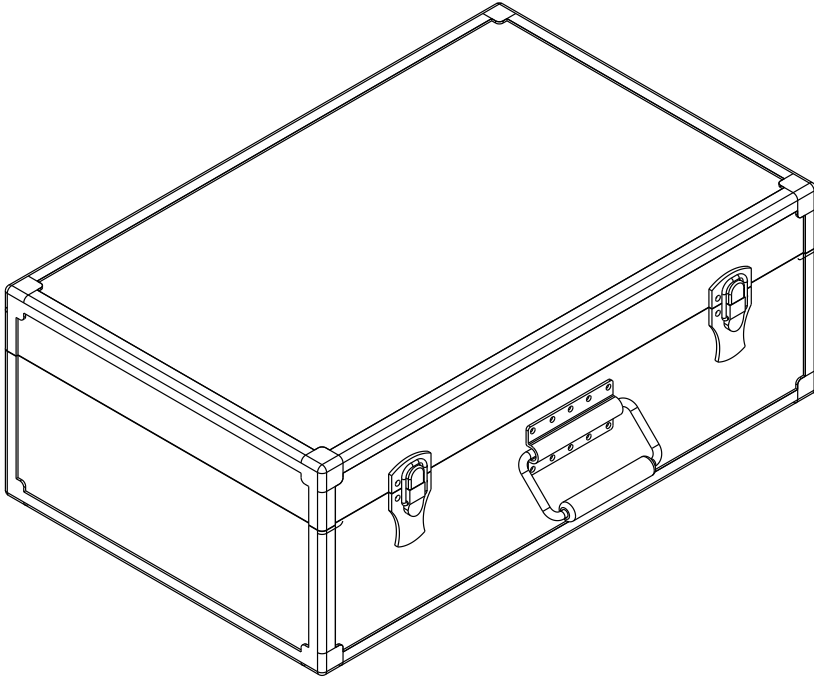


Repair Parts List, Fig. 5

L4081

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			L4081
Item	Part Number	Qty.	Description
1	DD4725530SR	1	Protective Storage Case, Models PTW1000 and PTW2000

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