

NO. 1400

**HYDRAULIC LUBRICATION GUN
MAINTENANCE MANUAL**

Providing Solutions, Products and Training

www.valtex.com

NO. 1400 LUBRICATION GUN TROUBLE SHOOTING PROCEDURES

WARNING: PLEASE CHECK WITH VAL-TEX TO DETERMINE IF YOUR 1400 HYDRAULIC GUN IS UNDER WARRANTY. PERFORMING ANY OF THESE PROCEDURES (EXCLUDING NO. 8) OR USE OF ANY HYDRAULIC FLUID OTHER THAN UCON-500 WILL CAUSE THE WARRANTY TO BE CANCELLED. **DO NOT CARRY THE 1400 BY THE HANDLE**

| PROBLEMS | CAUSE | CORRECTIVE ACTION |
|---|--|--|
| Gun will not build pressure. | Air in fluid system. | Refill with hydraulic fluid. See Procedure 1. |
| | Check valve ball (No. 27) not holding. | Reseat or replace check valve ball. See Procedure 2. |
| | By-pass valve (No. 30) leaking. | Reseat or replace by-pass valve. See Procedure 3. |
| | Internal hydraulic relief failure (No. 33). | Replace Internal hydraulic relief (No. 33). See Procedure 5. |
| | Bad seal between coupler (No. 1) and buttonhead fitting. | Replace coupler washer (No. 1-04). See Procedure 8. |
| | Hydraulic pump piston failure (No. 25). | Replace pump piston (No. 25) and/or hydraulic pump cylinder (No. 22). See Procedure 7. |
| Gun only pumps when rear of gun is elevated. | Air in fluid system. | Refill with UCON-500 fluid. See Procedure 1. |
| Excessive pumping required to prime gun. | Air in fluid system. | Refill with UCON-500 fluid. See Procedure 1. |
| Hydraulic fluid leaking around rear of gun. | Leaking fluid bag (No. 40). | Replace fluid bag. See Procedure 4. |
| Piston assembly (No. 9) springs back after being pushed down. | Air in fluid system. | Refill with UCON-500 fluid. See Procedure 1. |
| Handle (No. 36) springs up. | Check valve ball (No. 27) not holding. | Reseat or replace check valve ball. See Procedure 2. |
| Hydraulic fluid mixed with lube sealant. | Leakage around piston assembly (No. 9). | Replace seals on piston assembly. See Procedure 6. |



PROCEDURE NO. 1

REFILLING OF THE #1400 HYDRAULIC GREASE GUN WITH UCON-500 FLUID

1. Open by-pass valve (No. 30).
2. Remove the grease barrel cap (No. 8).
3. Using the grease gun handle (No. 36), push the piston assembly (No. 9) to the bottom of the grease gun barrel (No. 18). Close by-pass valve (No. 30).
4. Remove the fluid bag barrel cap (No. 42).

NOTE: On some hydraulic grease guns, the fluid barrel cap is secured with a set screw. Check to see that the set screw is loosened.

5. Place the grease gun on a table with the grease gun barrel (No. 18) pointed down. After the grease gun is primed, stroke the handle an additional 50 times.
6. Remove cap screw (No. 10) from the fluid bag bleeder assembly (No. 40).
7. Fill fluid bag (No. 40) with UCON-500 fluid. Let the gun stand for 15 minutes or longer so that any air in the fluid bag will come to the top. Top off with UCON-500 fluid again and replace cap screw (No. 10) making sure no air is trapped in the fluid bag.

NOTE: Use only UCON-500 fluid as it promotes increased life of the rubber parts in the grease gun.

8. Put fluid bag barrel cap (No. 42) on. The gun is ready to load.

PROCEDURE NO. 2

RESEATING OR REPLACING CHECK VALVE BALL (NO. 27)

1. Place the grease gun on a table with check valve screw (No. 29) accessible.
2. Remove check valve screw (No. 29).
3. Remove and inspect spring (No. 28), filter screen (No. 29A) and ball (No. 27). Discard if damaged.
4. Inspect seat in body of grease gun. Make sure there is no debris around seat.
5. Drop ball (No. 27) back in grease gun. To reseat, tap the ball firmly with a flat nose punch.
6. Insert screen (No. 29A) and spring (No. 28) in grease gun.
7. Inspect washer (No. 26), replace if necessary.
8. Reinstall check valve screw (No. 29) in grease gun.

NOTE: If the screen, spring or check valve screw are damaged, replace all three with new parts. Some of the grease guns have been redesigned and the screens are not the same length in all guns.

PROCEDURE NO. 3

RESEAT OR REPLACE BY-PASS VALVE (NO. 30)

1. Remove cap screw (No. 32) and by-pass stop (No. 31).
2. Remove and inspect by-pass valve (No. 30). Look for cuts on the ball.
3. Check the o-ring (No. 15A) on the by-pass valve and replace if necessary.
4. Inspect seat in the body for cuts or debris.

NOTE: The seat can be reformed by tightening the by-pass valve (No. 30) with a wrench. Do not use excessive force.

5. If the by-pass valve is in good condition, reuse it. If not, replace it.
6. Reinstall the by-pass stop (No. 31) and cap screw (No. 32).
7. Refer to the refilling instructions outlined in Procedure No. 1.

PROCEDURE NO. 4

FLUID BAG (NO. 40) REPLACEMENT

1. Open by-pass valve (No. 30).
2. Using the grease gun handle (No. 36), push the piston assembly (No. 9) to the bottom of the grease gun barrel (No. 18). Close the by-pass valve (No. 30).
3. If a set screw is used to secure the fluid barrel (No. 41) to the body (No. 21) loosen it.
4. Secure the grease gun body (No. 21) in a vise with the grease barrel (No. 18) pointed up. Use a strap wrench to remove the fluid bag barrel (No. 41). Do not use a pipe wrench as it may damage the fluid bag barrel.
5. Remove and discard the fluid bag assembly (No. 40). This includes the seal ring.
6. Place the fluid bag barrel on a table and insert the new seal ring and fluid bag into the fluid bag barrel.
7. Fill the fluid bag with UCON-500 fluid (use only UCON-500 because of its compatibility with rubber parts).
8. Screw the fluid bag barrel onto the body (No. 21). Using a strap wrench, tighten with enough force to insure a good seal.
9. Refer to the refilling instructions outlined in Procedure No. 1.



PROCEDURE NO. 5

INTERNAL HYDRAULIC RELIEF (NO. 33) REPLACEMENT

1. Follow instructions for replacement of fluid bag in Procedure No. 4, step 1 through 4.
2. Inspect fluid bag assembly (No. 40) and replace if necessary.
3. Once you have removed the fluid bag, the internal hydraulic relief (No. 33) will be exposed.
4. Remove internal hydraulic relief (No. 33) and o-ring (No. 34). Replace with new parts.

DO NOT ATTEMPT TO REPAIR OR ADJUST THE INTERNAL HYDRAULIC RELIEF.

5. Refer to fluid bag replacement in procedure No.4, steps 6 through 9.

PROCEDURE NO. 6

PISTON ASSEMBLY (NO. 9) REPLACEMENT OR REPAIR

1. Remove grease barrel cap (No. 8).
2. Close by-pass valve (No. 30) and carefully pump the piston assembly (No. 9) out of grease barrel (No. 18) Until you are ready to replace the piston assembly, leave grease gun sitting up-right on the fluid barrel cap (No. 42).
3. Using a spanner wrench remove outer washer nut (No. 12) or (No. 12A) and inner washer nut (No. 17). Do not score piston surface.
4. Remove outer hydraulic cup (No. 13), inner hydraulic cup (No. 16) and o-ring (No. 15). Replace with new parts.
5. Reinstall outer and inner washer nuts.
6. Remove cap screw (No. 10) from the piston assembly (No. 9). Inspect copper washer (No. 11A) and replace if necessary.
7. Return piston assembly (No. 9) to the grease gun barrel (No. 18). Take care that inner hydraulic cup is not damaged when you insert piston assembly into grease barrel.
8. Push piston assembly down until the top of piston is even with the top of the grease gun barrel.
9. Top off the gun with UCON-500 fluid through the opening left when cap screw (No. 10) was removed from piston assembly (No. 9).
10. Reinstall cap screw (No. 10) with copper washer (No. 11A).
11. Open by-pass valve (No. 30) and push piston assembly to bottom of grease gun barrel.
12. Close by-pass valve (No. 30).
13. Refer to the refilling instructions outlined in Procedure No. 1, step No. 4 through 8.

PROCEDURE NO. 7

REPLACEMENT OF HYDRAULIC PUMP PISTON (NO. 25) AND HYDRAULIC PUMP CYLINDER (NO. 22)

1. Place the grease gun in a vise with the pump piston (No. 25) accessible.
2. Remove the lock nut (No. 39) link washer (No. 39B) and stripper bolt (No. 38) where it connects to the pump piston (No. 25), freeing the stop link (No. 39A) from the fulcrum assembly (No. 35).
3. Pull the pump piston (No. 25) out of the hydraulic pump cylinder (No. 22) and inspect. If any wear or damage is visible, replace it when instructed in step 6.
4. Using a spanner wrench, remove and inspect the hydraulic pump cylinder (No. 22). Replace with a new hydraulic pump cylinder, if required.
5. Replace o-rings (No. 11, 23, and 24).
6. Insert pump piston (No. 25) into hydraulic pump cylinder (No. 22)
7. Reinstall hydraulic pump cylinder (No. 22) in the grease gun body (No. 21).
8. Reconnect the fulcrum assembly (No. 35) to the pump piston (No. 25) with the stripper bolt (No. 38), stop link (No. 39A), link washer (No. 39B) and lock nut (No. 39).
9. Refer to the refilling instructions in Procedure No. 1.

PROCEDURE NO. 8

REPLACE COUPLER WASHER (No.1-04)

1. Remove coupler cap (No.1-01). Keep gasket (No. 1-02).
2. Remove spring (No. 1-03).
3. Replace nylon coupler washer (No. 1-04).
4. Reinstall spring (No. 1-03).
5. Reassemble coupler using gasket (No. 1-02) and cap (No. 1-01).

HYDRAULIC GUN EXCHANGE PROGRAM

- ALL BRANDS ACCEPTED
- COVERS ALL INTERNAL PARTS AND REPLATING
- RAPID RETURN ON ALL GUNS TRADED IN
- FREE ESTIMATES
- BASE PRICE DOES NOT INCLUDE EXTERNAL PARTS, HOSE ASSEMBLY OR GAUGE
- CONTACT VAL-TEX OR YOUR LOCAL AGENT



VAL-TEX

THE ANSWER IS - VAL-TEX PRODUCTS AND TRAINING

VALVE LUBE SEALANTS

STICK FORM



"J" SIZE CARTON (16 STICKS)
FOR HYDRAULIC GUN
APPROX. 8 LBS./3.63 KILOS (NET)

"K" SIZE CARTON (12 STICKS)
FOR SCREW PRIME GUN
APPROX. 8 LBS./3.63 KILOS (NET)

LUBE PACK FORM



"P" SIZE CARTON (16 LUBE PACKS)
FOR HYDRAULIC GUN
APPROX. 8 LBS./3.63 KILOS (NET)

BULK FORM



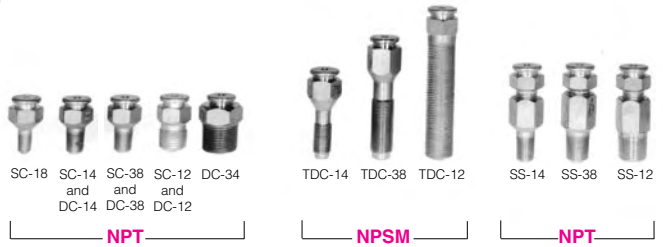
5 QT. CAN
10 LBS./4.53 KILOS

5 GAL. PAIL
40 LBS./18 KILOS

16 GAL. DRUM
120 LBS./54.43 KILOS

LUBE SEALANT FITTINGS & ADAPTERS

Giant Button Head Fittings



SC-18 SC-14 SC-38 SC-12 DC-34
and and and and
DC-14 DC-38 DC-12

TDC-14 TDC-38 TDC-12 SS-14 SS-38 SS-12

NPT

NPSM

NPT

Auxillary Fittings



AF-1 AF-2

Capped Fittings



CF-14 and CF-14-GB CF-38 and CF-38-GB CF-12 and CF-12-GB

Body Bleed



BB-38 (3/8" NPT) BB-12 (1/2" NPT) BB-1 (1" NPT)

Packing Injectors



PI-38 (3/8" NPT) PI-12 (1/2" NPT)

Tool



PRT-12



ZERK ADAPTER



WKM #1



WKM #2



CIW #1



CIW #2



CIW #3

Adapters

QS-2000A

AIR OPERATED-FOR STICK OR BULK

COMPACT



FAST EFFORTLESS INJECTION

VALVE FLUSH



QS-5000

AIR OPERATED-FOR STICK OR BULK

LARGE 5 LB. CAPACITY



PREFERRED BY HIGH VOLUME USERS