



**SERVICE INSTRUCTIONS
MODEL 393101-1
MAJOR REPAIR KIT**

393101-1

DESCRIPTION

Pump Tube Assembly Repair Kit 393101-1 contains parts needed to service Pump Tube Assemblies 332930 and 333183, -A1, -B1, and -C1 used on 7879 and 7889 Series Material Pumps.

KIT CONTENTS

PART NO.	DESCRIPTION	QTY.	PART NO.	DESCRIPTION	QTY.
18850	Stop Nut, 1/4-20	1	323693	Gasket, 1-7/16" O.D.	1
50666	Aluminum Gasket, 7/8" O.D.	1	323743	Adapter	1
131398-1	Valve Seat	1	323738	Valve Body	1
131402	Gasket, 1-11/16" O.D.	4	323742	Guide Washer	1
171032-12	Roll Pin, 3/32" x .937"	1	324648	Clip	4
171700-32	Ball, 1/2" Dia.	1	337376	Spacer	1
172190-7	Seal, 5/16" Thick	1	337377	Bearing	1
172190-8	Seal, 1/4" Thick	1	337378	Washer	2
172190-12	Seal, 3/8" Thick	1	337379	Wear Ring	1
			332223	Upper Bearing	1

DISASSEMBLY

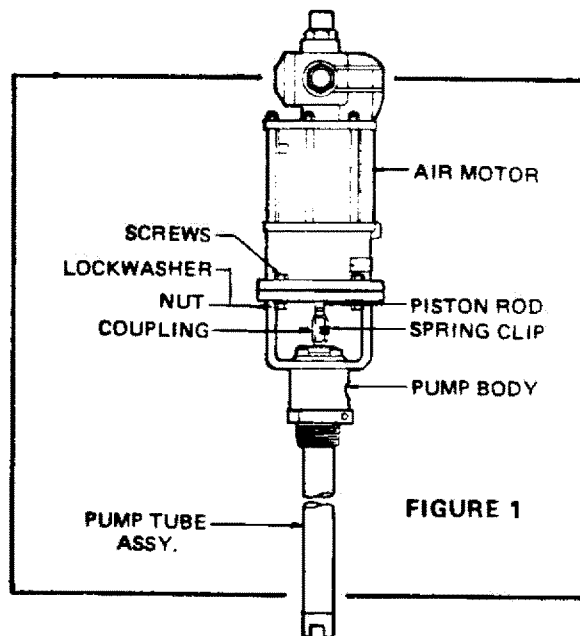
CAUTION: Before servicing, disconnect air supply. Relieve all air and material pressures.

To separate air motor from pump tube (Figures 1 and 2):

1. Secure pump body in vise.
2. Remove screws, nuts, and lockwashers holding pump to air motor.
3. Separate air motor and pump tube far enough to expose upper coupling.
4. Remove upper spring clip 324648 from coupling.
5. Rotate pump tube counterclockwise to unscrew coupling.

To disassemble pump tube (Figures 2 and 3):

1. Holding upper coupling, unscrew stop nut 18850 from primer rod and remove along with plate.
2. Loosen packing screw using adjustment bar, steel rod, or punch.



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3. Pull packing screw and attached parts out through top of pump tube.
4. Holding adapter with pipe or strap wrench, unscrew primer body.
5. Using pipe or strap wrenches, hold tube and unscrew adapter.
6. From inside of adapter remove two gaskets 131402, valve seat 131398-1, valve body assembly, and guide washer 323742.
7. Secure valve body 323738 in a vise and loosen screw. Remove seal 172190-8 and two washers 337378 from inside valve body.*

*On older models: Remove 3 packings from inside valve body.

8. Tap out roll pin 171032-12

9. Use punch in lower hole of primer rod to turn rod out of adapter.

10. Holding piston by its flats with an open end wrench, unscrew adapter. Remove gasket 50666 from adapter.

11. Remove ball 171700-32, spring, and spring retainer from inside of piston.

12. Remove barrel assembly* and two gaskets 131402 from either end of tube.

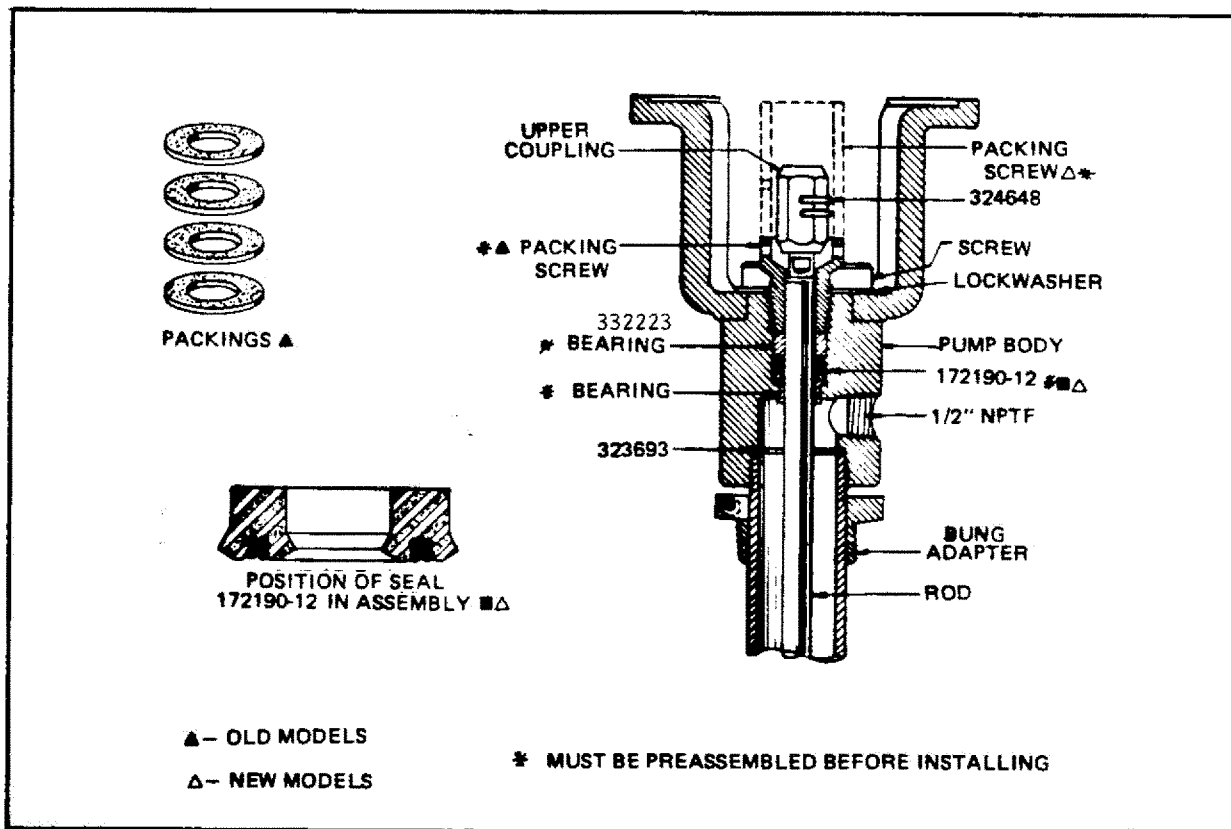


FIGURE 2 Upper Pump Tube Assembly

*On older models: Remove retainer and two gaskets 131402 from either end of tube.

13. Remove wear ring 337379, seal 172190-7, bearing 337377, and spacer 337376 from inside of barrel assembly.*

*On older models: Remove 2 washers, 4 packings and spacer from inside retainer.

14. Remove top spring clip from lower coupling. Unscrew piston from piston rod and insert.

15. Slide bearing, seal 172190-12, and second

bearing off piston rod and insert.* Note position of bearings for reassembly (Figure 2).

*On older models: Remove bearing, 4 packings, and second bearing.

16. Slide packing screw off piston rod and insert.

17. Remove spring clip 324648 and unscrew upper coupling from piston rod.

18. Clean all parts and inspect for wear and damage.

19. Worn or damaged parts present a threat to personnel and property. Replace any such parts.

REASSEMBLY (FIGURE 3)

NOTE: Before proceeding: Coat all seals and O-rings with SAE #10 oil. Tighten packing screw securely when assembling; no further adjustment will be necessary.

IMPORTANT: In order to use this kit on older type pumps (having packings instead of seals) it is necessary to order Barrel Assembly 337380 separately. It is not possible to install new type seals without using this assembly.

1. Assemble piston rod, lower coupling, piston, spring retainer, adapter, and primer rod.
2. Insert piston rod into upper body packing.
3. Place gasket 323693 into pump body.
4. Apply Loctite No. 242 to male threads of upper tube. Thread upper tube into pump body.

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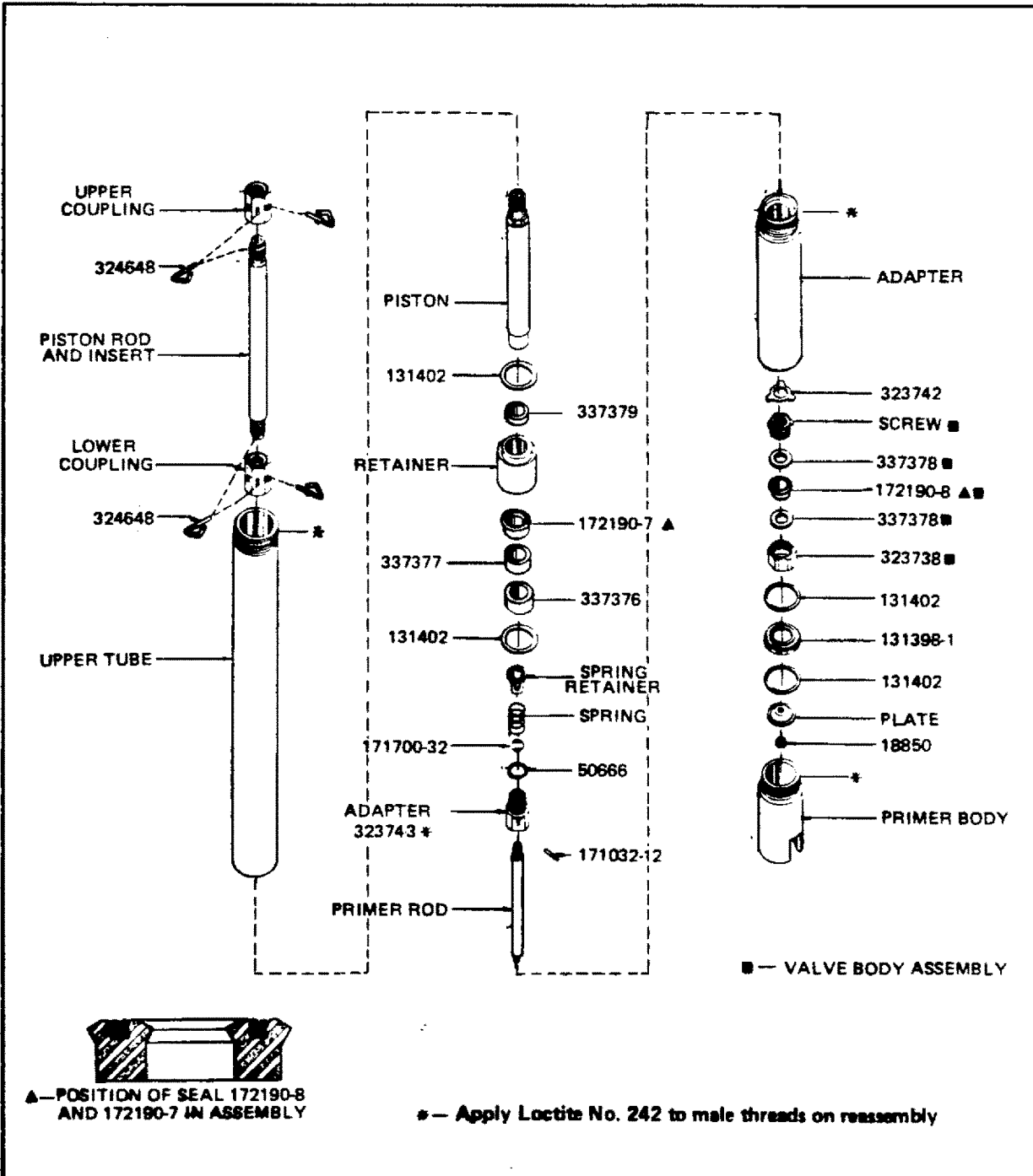


FIGURE 3 Pump Tube Assembly

REASSEMBLY (Cont'd.)

5. Install wear ring 337379 into retainer.
6. Install gasket 131402 into tube cavity.
7. Place retainer, seal 172190-7 (prelubricate), bearing 337377 and spacer 337376 on piston rod.
8. Install another gasket 131402 at bottom end of retainer.
9. Thread adapter into upper tube and hand tighten, after applying Loctite No. 242 to male threads of adapter.
10. Install guide washer 323742 into upper tube.
11. Assemble valve body assembly consisting of a screw, washer 337378 (prelubricate), seal 172190-8, another washer 337378 and body 323738. Install on primer rod.
12. Insert gasket 131402, valve seat 131398-1 and a second gasket 131402 into adapter cavity.
13. Install plate and stop nut 18850 on primer rod. Apply Loctite No. 242 to male threads of primer body.
14. Install primer body and tighten all tube parts.

IMPORTANT: *Valve body should be readily installed over the end of primer rod. If not, it may be necessary to increase the chamfer at rod end (when installing new seal 172190-8 on older models).*

NOTE: *During the tightening of adapter and tube, the seal 172190-7 is pressed into the retainer.*

CHANGES SINCE LAST PRINTING

Changed adapter 323743