fleX Power
by mountz

Rev（2）January 2013

PULSE TOOLS
Pulse Unit Oil Change & Withdraw Process Using Vacuum Tank System

Oil Change Service for Pulse Tool

The pulse tool requires regular maintenance to ensure the tool operates at optimal performance. The type of routine maintenance and the frequency is dependent on the application and how the tool is used. The pulse tool requires preventive maintenance like oil changes and have the parts inspected periodically. Regular oil changes will increase the life cycle of the tool, reduce maintenance costs and allow the tool operate properly.

Removing and adding oil into the pulse unit requires a syringe and vacuum tank system. The syringe is used to remove the old oil within the pulse unit. Then the pulse unit is placed inside vacuum tank, which is used to extract the air first. While inside the vacuum tank the pressure of the tank is released, which will cause the pulse unit to absorb new oil. This process will fill up the pulse unit completely. Then a syringe is used to remove any excess, the withdraw process. For further details, see page 2.

Withdraw Process Overview

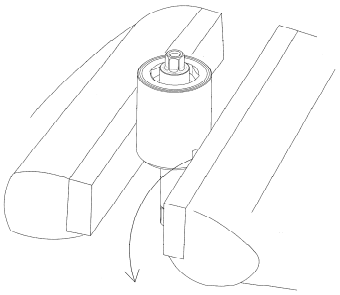
This withdraw process is for reference only. Potential influences that may cause variation in achieving these results, as indicated on the "Oil Withdraw Chart" on page 3, are:

1) Syringe needle size
2) Submersion time in vacuum tank
3) Vacuum tank performance or condition. VACUUM TANKS ARE DIFFERENT IN SIZE, CAPACITY AND CONFIGURATION. THERE IS NO STANDARD SIZE OR CAPACITY REQUIRED FOR SERVICING THE PULSE UNITS. THE PURPOSE OF THE VACUUM TANK IS TO CREATE VACUUM INSIDE THE PULSE UNIT TO ASSURE THERE IS NO AIR BUBBLES. THE VACUUM TANK ALLOWS YOU TO FILL UP OIL BACK INTO THE PULSE UNIT COMPLETELY WITHOUT ANY BUBLE OR AIR INSIDE THE PULSE UNIT.

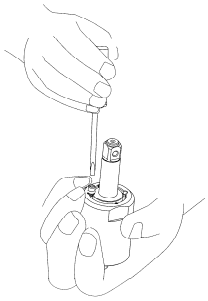
4) Oil Viscosity
5) Tool Condition
6) Please review operation manual or request support from a qualified Mountz Service Technician regarding questions for the proper pulse unit maintenance and techniques used for removing and refilling oil.

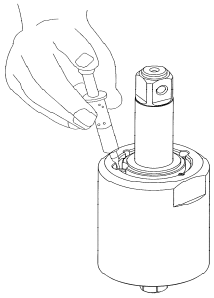
Removing Oil from Pulse Unit

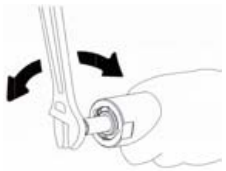
1. Once the Pulse Unit is taken out of the tool, install it in a tool vice.



2. Loosen (CCW) the torque adjustment screw all the way up to the minimmum. Remove the greasing screw (plug) and with the use of a syringe, remove the oil completely. Turn the anvil back and forth one turn to release any oil excess. Use syringe to remove any oil remaining in the unit.







Adding Oil Back into Pulse Unit

3. Set the pulse unit inside the vacuum tank and turn the system "on" to remove air from the pulse unit.

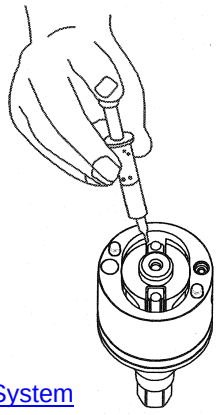
4. Set the vacuum system "on" to completely fill up the pulse unit with oil.

NOTE: Some vacuum systems perform the entire process in one step and other systems might require multiple steps to perfom this process. Please consult the manual for your vacuum system first. THE OBJECTIVE IS TO EXTRACT THE AIR COMPLETELY FROM THE PULSE UNIT AND THEN FILL IT UP WITH OIL AGAIN WITHOUT ANY AIR OR BUBBLES IN IT.

Oil Withdraw Process

5. You need to remove excess oil from the pulse unit using the oil withdraw process. Set the pulse unit in a tool vice. With the use of a syringe (1 to 2 cc Glass Syringe Size is

recommended) withdraw the units (cc) of oil as specified in the "Oil Withdraw Chart" (see page 4), according to the appropriate Pulse Tool Model. You might need to pull out and push in the oil to compensate for any displacement of oil in the needle.



6. Install the greasing screw (plug) back in again. The pulse unit is now ready to be installed back into the pulse tool and ready for torque setting.

Video: Sample of a Pulse Unit Oil Change & Withdraw Process Using Vacuum Tank System

Oil Withdraw Chart:

Once the pulse unit has been refilled with new oil**,** a syringe is used to remove any excess. The data in the chart is the recommended units of oil that will need to be withdrawn from the pulse unit.

Mountz Model	Mountz Part Number	Number of Pulses @ Max Torque + / - (3)	Number of Pulses @ Min Torque + / - (3)	Oil Withdraw cc +/- 10%
FLEX-40P	360113	26	36	0.3
FLEX-50P	360115	31	48	0.35
FLEX-60P	360117	31	43	0.45
FLEX-70P	360159	27	41	0.63
FLEX-90P	360119	22	32	0.9
FLEX-100P	360120	14	24	1.5
FLEX-130P	360121	16	21	1.6
FLEX-150P	360153	22	33	2.2
FLEX-40S	360132	26	36	0.3
FLEX-50S	360134	31	48	0.35
FLEX-60S	360136	31	43	0.45
FLEX-70S	360137	26	40	0.63
FLEX-30PX	360111	34	44	0.25
FLEX-40PX	360112	26	36	0.3
FLEX-50PX	360114	29	48	0.35
FLEX-60PX	360116	29	43	0.45
FLEX-30SX	360130	34	44	0.25
FLEX-40SX	360131	26	36	0.3
FLEX-50SX	360133	31	48	0.35
FLEX-60SX	360135	31	43	0.45
FLEX-50R	360141	30	43	0.35
FLEX-60R	360142	30	43	0.45
FLEX-70R	360143	24	37	0.63
FLEX-70RH	360151	21	35	0.63
FLEX-50RX	360148	30	43	0.35
FLEX-60RX	360149	30	43	0.45
FLEX-70RX	360150	24	37	0.63

Mountz Model	Mountz Part Number	Number of Pulses @ Max Torque + / - (3)	Number of Pulses @ Min Torque + / - (3)	Oil Withdraw cc +/- 10%
FLEXS-40P	360102	4	4	0.25
FLEXS-50P	360104	4	5	0.3
FLEXS-60P	360106	4	4	0.4
FLEXS-90P	360108	3	3	0.85
FLEXS-100P	360109	4	4	1.4
FLEXS-130P	360110	3	3	1.5
FLEXS-150P	360152	6	3	1.85
FLEXS-40S	360124	4	4	0.25
FLEXS-50S	360126	4	5	0.3
FLEXS-60S	360128	4	4	0.4
FLEXS-70S	360129	2	2	0.6
FLEXS-30PX	360100	3	4	0.2
FLEXS-40PX	360101	3	4	0.25
FLEXS-50PX	360103	4	4	0.3
FLEXS-60PX	360105	4	4	0.4
FLEXS-30SX	360122	3	4	0.2
FLEXS-40SX	360123	3	4	0.25
FLEXS-50SX	360125	4	4	0.3
FLEXS-60SX	360127	4	4	0.4
FLEXS-50R	360138	4	4	0.3
FLEXS-60R	360139	4	3	0.43
FLEXS-70R	360140	3	3	0.6
FLEXS-70RH	360144	2	2	0.6
FLEXS-50RX	360145	3	3	0.3
FLEXS-60RX	360146	3	4	0.4
FLEXS-70RX	360147	2	3	0.6

Note: Please review operation manual or request support from a qualified Mountz Service Technician regarding questions for the proper pulse unit maintenance and techniques used for removing and refilling oil.

Contact Mountz, Inc.
Phone: 408.292.2214
sales@mountztorque.com
www.mountztorque.com