Installation of Ride-On TPS Using ROTIS Pump

The ROTIS pump is shipped in two boxes. One box contains the hose, tools, dosage table, and a 55-gallon drum bung adapter. The second box contains the ROTIS pump housing. Please make sure you have all the parts before commencing the setup of the pump.

Always wear eye protection when working with pressurized tires!

**WARNING:** the ROTIS pump has an internal preset regulator that reduces the air pressure to the appropriate pressure for the safe operation of the pump. Tampering with the regulator may cause damage to the pump and will void the warranty. The system inlet pressure (pre-regulator) may be up to **180 psi max.**

**Initial Pump Setup**

1. Remove bung cap with NPT fine-thread (does not have valve fitting). Screw the bung adapter into the bung opening. Insert the pump shaft into the center of the bung adapter and push it all the way down into the 55-gallon drum. Tighten the setscrew on the adapter to keep the pump in place.

**WARNING:** Please make sure to transfer the bung adapter from an emptied drum to the next drum. The pump will not sit in the 55-gallon drum correctly without the adapter. If the adapter is lost or misplaced, please call Inovex for pricing on a replacement adapter (1-888-374-3366).

2. Locate the end of the black ¾ - inch hose with a Cam-Lock nipple. Pull the 2 Cam-Lock ears on the pump discharge port all the way forward and remove the 2 locking pins from the ears.

   Insert the nipple end of the hose into the Cam-Lock attachment on the pump and push the 2 ears all the way back (it may take some effort) against the pump to lock the hose in place. Insert the locking pins (if supplied) through the holes on the Cam-Lock fitting to lock the hose in place.

3. Look under the pump’s housing and locate the 2 color coded bulkhead hose connections. There are 2 color markers (yellow and black) next to the hose connections. Insert the yellow hose into the bulkhead fitting that has been marked with the yellow dot, and the black hose into the one that is marked with a black dot. Push the hose all the way in and test that it has locked into place by tugging on the hose to make sure that it does not slip out.

   The small air hoses can be detached from the pump by first pushing in the orange collar on the fitting all the way in, and then gently pulling the hoses out. **WARNING:** You can damage the fittings and the hoses if you pull the dual air line hoses out of the orange fittings without first pushing the orange collars in.
4. This ROTIS pump is supplied with an air hose to aid and speed up the re-inflation of the tires after the installation of the Ride-On sealants. Please install an appropriate air chuck/tool of your choice on the free end of the hose (the opposite end from where the hose connects to the pump). This tool must have a valve in it to prevent air loss.

5. Once you have installed the tool onto the hose, insert the nipple at the pump end into the coupling on the pump.

6. Insert the supplied straight tool into the hydraulic coupling in the discharge end of the hose. Open the ball valve and insert the tip of the hose into the second bung opening of the drum.

7. Select an appropriate nipple or coupling that matches your shop air system (not provided). Screw the nipple/coupling into the brass opening in the front of the pump. Please use Teflon tape to insure that the attachment is airtight. Connect shop air system to this coupling and check for any air leaks.

Press the counter reset button (large button on the same level as the digits of the counter) if you hear any air leaks form inside the pump housing. This should stop any further leaks inside the housing. Make sure that the 5/32 yellow/black dual hoses installed in step 3 do not leak. If there is any air loss, the hoses are not inserted adequately into the fittings. Push the hoses in to make sure they lock.
Priming the ROTIS Pump Prior to Installation

8. Press and hold down the reset button on the counter and using the smaller digit buttons (one button under each digit on the counter) set the counter to 50.

9. While holding on to the other end of the hose (with its tip in the other bung opening) press the remote reset button (you must press and hold the button for a minimum of 1 second for it to reset). This will start and prime the pump.

   Allow the pump to count down and automatically shut-off when the counter reaches zero. If the discharge hose has not filled with product (sealant pumping from the discharge), press the Remote Counter Reset Button one more time and allow one more cycle.

10. Once the pump has been primed and the hose is full of sealant, close the ball valve at the end of the hose.

   The ROTIS pump is now properly installed and ready for operation.

   The speed at which the ROTIS pump will inject Ride-On TPS into the tire depends on the pressure of the tire. The higher the pressure, the slower the installation will be. It is normal for the pump to take approximately 30-40 seconds to inject 40-ounces of sealant into a tire that is at 100 psi.

11. Using the supplied dosage table, locate the tire size that you want to install sealant into. Please note that there are 3 different counter settings for Regular and Severe applications depending on the starting pressure of the tire (0 psi, 50 psi, and 100 psi).

   0 psi – for tires that have not been aired up.
   50 psi – for tires that are mounted and pressurized up to 50 psi.
   100 psi – for tires that have that are pressurized above 50 psi.

   Example: 11-22.5 requires 40 oz. for Regular and 50 oz. for Severe. The counter should be set at:

<table>
<thead>
<tr>
<th>Tire Pressure</th>
<th>Regular</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 psi</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>50 psi</td>
<td>14</td>
<td>17</td>
</tr>
<tr>
<td>100 psi</td>
<td>16</td>
<td>20</td>
</tr>
</tbody>
</table>

   Example: 445/50-22.5 requires 56 oz. for Regular and 70 oz. for Severe. The counter should be set at:

<table>
<thead>
<tr>
<th>Tire Pressure</th>
<th>Regular</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 psi</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>50 psi</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>100 psi</td>
<td>22</td>
<td>28</td>
</tr>
</tbody>
</table>
12. After finding the correct dosage according to your tire size, pressure and application (Regular or Severe), press and hold down the **Remote Counter Reset Button** on the counter and using the smaller **Digit Buttons** (one button under each digit on the counter) set the counter to the appropriate number.

13. Rotate the tire into which Ride-On is to be installed so that the tire stem is between the 3 and 9 o’clock position (bottom half of the tire). Use a valve core remover tool to unscrew and remove the valve core from the tire valve stem. Quickly attach the tool to the valve stem to prevent any air loss. Open the ball valve and press the **Remote Counter Reset Button** (refer to step 9, above). This will start the pump. Once the correct dosage has been injected, the pump will automatically shut off.

15. Close the Ball Valve, and disconnect the tool from the valve stem. Re-insert the valve core taking care **not to over-tighten the valve core**. Inflate the tire to the vehicle manufacturer’s recommended tire inflation pressure using the supplied air line (refer to step 4). Press the Remote Counter Reset Button to reset the counter. Repeat step 13 for installation in new tire.

**CAUTION:** Be sure to **close the ball valve** after each installation, otherwise, since the hose is under pressure, several ounces of Ride-On may squirt out of the hose.

**MAINTENANCE:** Under normal use, the ROTIS pump system requires minimal maintenance. **Drain the filter on a weekly basis (or more frequently if necessary),** especially if the pump is being used everyday. To drain the filter, press the needle valve on the filter regulator to allow any accumulated moisture to drain out.

Always identify the tires that contain Ride-On to prevent double treatment. You can mark the tires using a permanent tire marker, or use Ride-On’s o-rings. Alternatively, you can mark the vehicle using Ride-On trailer or tractor stickers.

Please note: It is **NOT necessary** to immediately drive the vehicle. Once the vehicle is driven, Ride-On TPS is evenly dispersed over the entire tread area of the inner surface of the tire. Do not be concerned with any initial vibrations. **Until Ride-On TPS has completely coated the inside of your tires, you may experience a slight vibration. To avoid wheel balance problems, it is critical that the correct amount of Ride-On TPS is installed for your tire size.**

Ride-On TPS is a stable compound that can be stored in its original closed container for up to 3 years. Please store Ride-On indoors or out of direct sunlight. Once a drum has been opened, it is very important to keep the Ride-On in an airtight environment. This can be accomplished by connecting the quick connect on the pump hose to the drum return spout. If the product is to be stored for prolonged periods (more than four weeks), it is recommended that the pump be rinsed with water and the NPT bung cap retightened on the drum.