Re-rounding - Split Type

The following is a step-by-step set of instructions for Split Type pipe re-rounding. You are encouraged to read the attached document titled “Pipe Re-Rounding Instructions” provided with this document. This document will give you specific precautionary statements to ensure your success and safety while pipe re-rounding.

The procedure for re-rounding using a Split Type Re-rounder differs greatly from normal procedures used to re-round small diameter PVC pipe. A Split Type Re-rounder is pulled to the area of deflection, then “jacked” to the proper diameter while a vibrator moves and reconsolidates the material around the pipe. The end result is the same as pull type re-rounding where the material around the pipe moves and consolidates at the sides of the pipe to support the pipe so it can maintain its roundness.

The equipment required for Split Type Re-round include:

1. Split Type Re-rounder
2. Air compressor capable of 100 cfm and 100 psi.
3. Enough air hose to reach from manhole to manhole – It is suggested to use 1/2 inch poly tubing with a 200 psi rating and in a continuous length to prevent joints from catching on pipe joints.
4. In-line oiler to lubricate the re-rounder. This is usually located at the air compressor at the point the air hose is connected.
5. 12 volt power source to operate air actuator valve.
6. Enough hydraulic hose to reach from manhole to manhole. Hydraulic hose is used to operate hydraulic ram in pipe re-rounder.
7. Hydraulic pump, included with Split Type Re-rounder.
8. Cable or rope to pull and position pipe re-rounder. Depending on the size of the re-rounder, a winch may be required.
9. Roller assembly to position the cable so it doesn’t pull against the edge of the pipe when pulling the re-rounder.
10. Safety Glasses – High pressure air is use and can cause debris to fly into eyes.
11. Ear Protection – Vibrators are very loud and well about the OSHA permissible exposure limits.
12. Gas Monitors – This is an OSHA requirement and should not be ignored.
13. Ventilators to provide fresh air when working in manhole
14. Television Equipment to ensure proper placement of Split Type Re-rounder and to monitor re-rounding process
15. Pipe Cleaning equipment – It is absolutely essential to be sure the pipe is perfectly clean. If the Split Type Re-rounder is position over debris, the debris could damage the pipe.

Follow these steps for setting up the Split Type Re-rounder.

1. Properly clean sewer pipe to ensure there will be no damage to the pipe.
2. Depending on the opening size of the manhole, it may be necessary to disassemble the Split Type Re-rounder and re-assemble it in the pipe. The Split Type Re-rounder is built into two sections and is easily disassembled.

3. Once the Split Type Re-round is installed into the manhole and prior to inserting it into the pipe, check to be sure that all connections are complete and secure. This will include the power connection for the electrically operated air actuator valve, hydraulic hose and the air line.
4. Connect the pull cable or rope to the front of the re-rounder and ensure the connection is secure so it cannot fall off during the re-rounding process.
5. Position television equipment into the pipe in front of the Split Type Re-rounder.
6. At the opposite manhole, the manhole where the Split Type Re-rounder will exit, install manhole roller guide if needed.
7. If used, connect the pull cable for the Split Type Re-rounder to the winch system.
8. Push or pull the Split Type Re-rounder into the pipe using the winch system or pulling by hand and position at the first area of deflection. You can accomplish this by using your television camera or by measuring the cable or rope as it is pulled through the pipe.

Follow these steps to re-round pipe

1. Once the Split Type Re-rounder is properly positioned, using the Hydraulic Pump, jack the Split Type Re-rounder until it contacts the top of the pipe.
2. Start the vibrator using the 12 volt power supply. The vibrator will be very loud and ear protection should be worn. Also, the high pressure air can cause debris to fly so proper eye protection should be worn. IMPORTANT – Be sure the inline oiler is in place and working. Failure to do so will cause the vibrator to fail.
3. Once the vibrator starts, slowly pump the Hydraulic Pump to jack the Split Type to the full diameter of the pipe. The Re-rounder is designed so it cannot be jacked beyond the full diameter of the pipe.
4. Once the Split Type Re-rounder is fully expanded, let the vibrator run for a minute or two. The more the pipe is deflected, the longer you allow the vibrator to work. Remember, you are trying to consolidate and move the material around the pipe into a position that will support the pipe walls to maintain roundness. Do not rush this process.
5. Stop the vibrator and release the hydraulic pressure. The Split Type Re-rounder will collapse and is ready to pull to the next area of deflection.
6. Repeat steps 1 through 5 until all areas of deflection are fixed.
7. Disassemble Split Type Re-rounder and remove from pipe.