

Operator Check List

Picote Pro Packer



Before Use: Determine correct (maximum) operating pressure for the Pro Packer. Excessive pressure can cause the Packer to fail or explode. The correct operating pressure can also be found marked on the end cap.

Picote Pro Packers are only intended for use in circular pipe profiles.

3D Packer Model	Maximum Operating Pressure	Colour of End Caps
DN50-75 (2-3")	4.2 Bar (60 PSI)	BLACK
DN70-100 (3-4")	3.5 Bar (50 PSI)	GREEN
DN100-150 (4-6")	2.5 Bar (36 PSI)	BLUE
DN150-250 (6-10")	2.5 Bar (29 PSI)	RED

Bendy Packer Model	Maximum Operating Pressure	Colour of End Caps
DN50 (2")	4.2 Bar (60 PSI)	BLACK
DN70 (3")	4.2 Bar (60 PSI)	WHITE
DN75-100 (3-4")	3.5 Bar (50 PSI)	GREEN
DN100-150 (4-6")	2.5 Bar (36 PSI)	BLUE
DN150-200 (6-8")	2.0 Bar (29 PSI)	RED

PREPARING THE PRO PACKER

1. Start with the Pro Packer unpressurized.
2. The outer surface of the Pro Packer has to be covered with a stretch film. This reduces the need for cleaning the Packer and ensures a longer life-time.
3. Before covering the Pro Packer with the stretch film attach the pull ropes etc. Ensure that the threaded connectors, on either of the cap ends, are not covered. At approximately a 45° angle, wrap the Pro Packer from front to rear, overlapping each pass by 150mm (6"). Tape each end to secure the protective stretch film.
4. Ensure that the whole length of the Pro Packer is covered with the film.

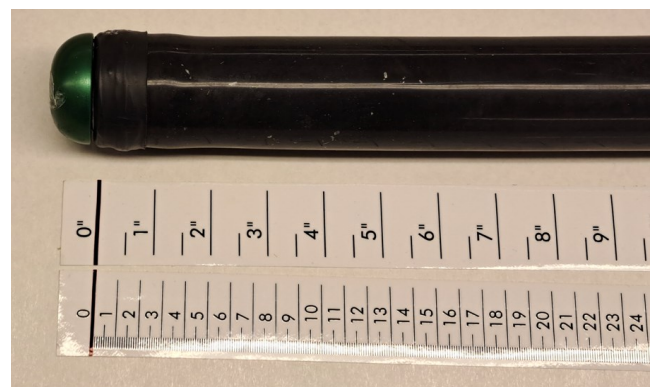


LOCATING THE REPAIR ON THE PACKER

1. Due to the structure of the Pro Packer, both ends must be liner/patch free as the rubber does not fully inflate around the end caps.

This "Off-limits" Zone is measured from each end of the Pro Packer from where the ends of the bladder meet the metal caps (Refer to Photograph and Table Below).

PRO PACKER SIZE	MEASURE FOR OFF-LIMIT-ZONE
DN50 (2") - Bendy Packer DN75 (3") - Bendy Packer	7.5cm (3") 10cm (4")
DN75-100 (3"-4") DN100-125 (4"-5") DN125-150 (5"-6")	15cm (6")
DN150-200 (6"-8")	17.5cm (7")



2. Check the Off-Limits Zone from the table, measure the distance on the on the surface of the film using a suitable marker pen.



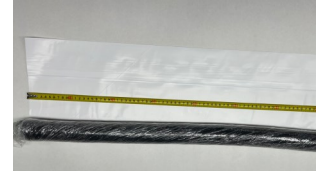
3. Cut the required amount of liner/patch staying within the section between the Off-Limit Zones.



When inflating, Pro Packer could swell & burst if no supporting hose is used.

SUPPORT HOSE - USING ON FULL LENGTH OF PRO PACKER

1. Measure out the support hose and cover the Pro Packer from the end cap to the adapter hose located on the air side end cap.



2. Fold support hose neatly around end cap. Secure in position by taping it to the both end caps. Do not cover the threaded connectors on the end caps.

3. Finally, use rubber bands (doubled over if needed) , approximately every 25cm (10”), to secure the support hose onto the Pro Packer bladder.



SUPPORT HOSE - USING ON ONLY ENDS OF PACKER



1. When using support hose only on the ends, the hose should be measured so that it will reach at **minimum 10cm (4”)** under the patch.

The same rule applies when patches are shorter than the full length of the Pro Packer.



2. Secure support hose by taping it to the metal end cap and secure with a doubled over rubber band at the far end of the support hose.

Repeat at other end.



3. Copy the “Off-Limit Zone” measurement onto the surface of the support hose using a marking pen.



4. Use the lines that you marked earlier for securing the patch, ensure it is centered and won't extend into the Off-Limit Zones.

Fold patch neatly.

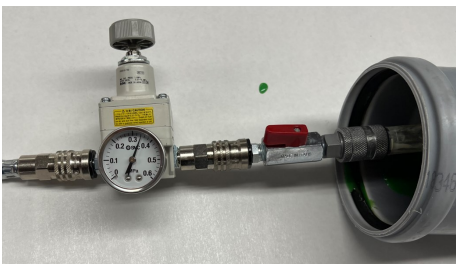
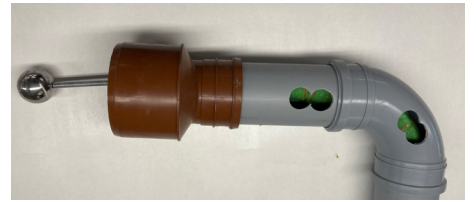
Always check your local, state & country regulations, requirements and application restrictions regarding the use of Point Repairs. Follow instructions provided by the manufacturer and supplier of the Point Repair materials supplier. The Point Repair examples used in this document are presented for illustrative purposes only.

- There are few ways to secure the patch on the Pro Packer.
- In this example patch is secured with rubber bands.
- Start securing it from the edge, starting on the End Cap side using rubber bands (doubled over if needed).



- Depending of job site: install navigation Guide ball or pull rope to the connector on the end cap if needed.
- You can also utilize the Pro Packer Front Wheel Drive system (see manual for more details).
- Attach the needed amount of Push Rods to reach the repair area.

- Navigate the Pro Packer until you meet the tape mark on the Push Rods.
- The Pro Packer should be in the proper renovation location if you have accurately marked the correct distance on Push Rods.
- Use the CCTV inspection camera to help verify that the patch repair is properly positioned.



- Inflate the Pro Packer using the Pressure Regulator until it has reached its proper operating pressure.
- Prevent unauthorized access to the work site to ensure tools stay untouched during the curing process.
- Keep the Pro Packer pressurized until patch is cured completely.
- Resin curing time depends of type of resin used and temperature. Curing can take longer in colder environments.

REMOVING THE PACKER (POST INSTALLATION)

- Once the patch has fully cured, release the pressure from the Pro Packer.
- Once the Pro Packer has fully deflated, pull it from the pipe using the Picote Push Rods and/or pull rope.
- Use a CCTV camera to confirm that Patch has fully cured and is wrinkle free.
- If there is no need to install another Patch, remove the support hoses, stretch film, etc.
- Clean the installation equipment and work environment.
- Inspect the Pro Packer for damage or wear.

MAINTENANCE

- Before performing any maintenance always check that the air supply line is disconnected.
- Clean the surface of the Pro Packer before and after each use. The primary method for cleaning should be a damp cloth and soap. Protecting the Pro Packer with stretch film reduces the need for having to use cleaning solvents.
- If the Pro Packer has been stored for a extended or unknown amount of time, or if you are unaware of its condition, it should be visually inspected and tested.
- The test should be done by placing the deflated Pro Packer inside a correctly sized pipe, carefully pressurizing the Pro Packer inside and simultaneously monitoring for leaks or damage (always use proper PPE Safety Equipment).
- Do not use the Pro Packer if leaks are found. Contact Picote or you Picote Reseller for repair or replacement.

SERVICE & REPAIR

- Pro Packers must be repaired or serviced at Picote Service Center by trained personnel.