

PROTAPER RETREATMENT KIT

CLINICAL DIRECTIONS FOR USE

Before removing gutta percha, carrier-based obturators or paste from a root canal:

- Carefully observe 3 different, horizontally angulated radiographic images.
- Visualize the density of obturation material relative to the width, length, and curvature of the canal.
- Access the pulp chamber and note the circumferential dimensions of the obturation material at the orifice(s).
- Select the best removal technique after radiographic and clinical assessment.
- Without cutting dentin, remove obturation material in a progressive crown-down manner.

GUTTA PERCHA / CARRIER-BASED OBTURATOR REMOVAL

- 1) When the rotary removal method is utilized, select the lowest speed (500-700 RPM) that will effectively engage and remove obturation material from the canal.
- 2) Without engaging dentin, gently press the spinning ProTaper D1 file (30/09) into the gutta percha to create friction, generate a heat wave, and auger material out of the canal.*
- 3) Remove the D1 file frequently, inspect the blades for obturation material and clean the debris from the flutes.
- 4) Continue with the D1 file, or the ProTaper Retreatment file that fits passively between the dentinal walls, until gutta percha is removed from the coronal one-third of the canal.

* *In the instance of carrier removal, select the appropriately tapered ProTaper Retreatment file that can be carried sufficiently deep into the canal and lateral to the carrier. A long engagement zone will more effectively auger the entire length of the carrier out of the canal. The D1 file is the only file in the series with an active tip. The D2 and D3 files are safe-ended.*

- 5) Select the ProTaper D2 file (25/08) and, using one or more passes, auger obturation material from the middle one-third of the canal.
- 6) When appropriate, choose the ProTaper D3 file (20/07) and lightly press into the more deeply positioned material and auger obturation material out of the apical one-third of the canal.
- 7) Continue with the D3 file as long as the flutes of the instrument, upon removal, are loaded with obturation material.
- 8) When the obturation material is short of the canal terminus, use small sized hand files in the presence of a viscous chelator to negotiate and secure the rest of the canal.
- 9) After assessing the glide path, select either manual or rotary NiTi ProTaper files to shape and finish the canal.

SOLUBLE PASTE REMOVAL

- 1) When the rotary removal method is utilized, select the lowest speed (500-750 RPM) that will effectively engage and remove obturation material from the canal.
- 2) Flood the pulp chamber with the appropriate solvent and probe the canal orifice with an explorer to check if the paste has been effectively softened.
- 3) Without engaging dentin, gently press the active tip of the spinning ProTaper D1 file (30/09) into the material and use a short pecking motion to auger material out of the canal.
- 4) Remove the D1 file frequently, inspect the blades for obturation material and clean the debris from the flutes.
- 5) Continue with the D1 file, or the ProTaper Retreatment file that fits passively between the dentinal walls, until paste is removed from the coronal one-third of the canal.
- 6) Select the ProTaper D2 file (25/08) and repeat the same pecking action to auger obturation material from the middle one-third of the canal.
- 7) When appropriate, choose the ProTaper D3 file (20/07) and, in the same way auger the more deeply positioned paste material out of the apical one-third of the canal.

- 8) Continue with the D3 file as long as the flutes of the instrument, upon removal, are loaded with obturation material.
- 9) When the obturation material is short of the canal terminus, use small sized hand files in the presence of a viscous chelator to negotiate and secure the rest of the canal.
- 10) After assessing the glide path, select either manual or rotary NiTi ProTaper files to shape and finish the canal.