STEP 1:
Disconnect old oxygen sensor connector from vehicle harness using extra care not to damage connector, as it must be reused.

STEP 2:
Remove old sensor from vehicle using an O2 sensor socket or 22mm wrench. Place the old and new oxygen sensors side by side on a flat surface, preparing to make an accurate cut of the lead wires. Cut the lead wire(s) of the old sensor to a length that when the plug end is spliced to the new universal sensor, the overall length will be the same or slightly longer than the old sensor.

**Important!! Before making the cut, add 2” to 3” of additional length to the plug end to allow for the extra wire needed when making the staggered splice. See following diagram.**

STEP 3:
Stagger-cut wire lead(s) stripping off approx. 1/4” of insulation from the end of each wire.

>>> For steps #4 and #5 please refer to the attached wire placement & colour coding diagrams in the Installation Instructions to determine proper wire matching of universal sensor lead(s) to connector lead(s) for each specific application (heater wires are not polarity dependant).

WARNING: **DO NOT CONNECT TO YOUR SENSOR IF YOU CANNOT MATCH WIRE COLORS. CLICK HERE to download a PDF version of the Oxygen Sensor Installation Instructions.**

STEP 4:
A) On universal sensors where heat-shrink tube(s) are already installed: insert just striped portion of wire(s) into crimp terminals of new sensor and crimp terminals
B) On universal sensors where heat-shrink tube(s) are not installed: insert just striped portion of wire(s) into crimp type “butt” connectors (approx. 1/4”) and crimp.

STEP 5:
After all connections have been made, slip the heat shrink tube over the crimped connections and heat the tube with an appropriate heat source until the connection is completely sealed, taking care not to over-heat or burn tubing (see fig. 3).
STEP 6:
Remove protector cap just prior to installation
A) Flanged applications-\textit{(where flange is not already installed on sensor)} Install flange to exhaust manifold first, then mount sensor in flange (a copper gasket is bonded to the flange & no additional gasket is required)
B) Flanged applications- \textit{(where flange is already installed on sensor)} it is important to use the supplied gasket before installing sensor

STEP 7:
If not already coated, apply (enclosed) anti-seize to oxygen sensor threads

STEP 8:
Install sensor body ensuring lead wire is not twisted or bent

STEP 9:
Install all sensors with new gasket supplied & torque to proper specs as below:
\begin{itemize}
  \item **M18 sensors** - Install finger tight then 1/2 - 3/4 turn with wrench / O2 sensor socket 26-33ft. lbs.
  \item **M12 sensors** - Install finger tight then 3/4 - 1 turn with wrench / O2 sensor socket 13.2-17ft. lbs.
\end{itemize}

\begin{table}
\begin{tabular}{|c|c|}
  \hline
  M18 Sensors (Zirconi) & M12 Sensors (Titania) \\
  Detecteurs M18 (Zircnon) & Detecteurs M12 (Bioxyde de Titane) \\
  Sensors M18 (Zirconi) & Sensors M12 (Titania) \\
  \hline
\end{tabular}
\end{table}

\begin{figure}
\centering
\includegraphics[width=0.7\textwidth]{sensors.png}
\caption{Sensors Diagram}
\end{figure}

STEP 10:
Connect and route lead wire as originally installed.

\textbf{Warning:} Anti-seize compound may cause irritation to the skin or eyes. In case of contact, wash affected area with soap and water. In case of eye contact, flush with water for 15 minutes. If irritation persists, consult a physician. If swallowed, do not induce vomiting. Keep out of reach of children.

\textbf{NOTE:}
\begin{itemize}
  \item \textbf{DO NOT} drop or use an oxygen sensor that has been dropped as this may have caused shock damage to the ceramic cell
  \item \textbf{DO NOT} use any compounds on or around the sensor unless labeled as oxygen sensor friendly products
  \item \textbf{DO NOT} use impact wrench or conventional socket type wrench to install sensor
  \item \textbf{DO NOT} allow sensor or lead wire to touch exhaust manifold or any other hot component
  \item \textbf{DO NOT} expose this product to water, oil, windshield cleaner, anti-corrosion oil, grease, terminal cleaner, etc.
  \item \textbf{DO NOT} use leaded fuels, silicone or metal based additives
  \item \textbf{DO NOT} store under high humidity conditions
\end{itemize}