### Connect the Torch Lead

**Note: When using lead lengths that are greater than 50 ft (15 m), end users can experience a degradation to their initial cut quality, start reliability and consumable life. This situation can be improved by allowing for longer ramp up times, which will give time needed for the proper volume of gas to move from the power supply to the torch head.**

To connect the machine torch lead to the MAX200, proceed as follows (see Figure 3-7 ):

1. Connect the torch coolant return hose (blue-w/red band) to the bulkhead adapter.
2. Connect the torch coolant supply hose (blue-w/green band) to the bulkhead adapter.
3. Connect the pilot (shield) gas hose (blue) to the bulkhead adapter.
4. Connect the plasma gas hose (red) to the adapter. This connection is left hand-threaded; it tightens in a counter-clockwise (ccw) direction.
5. Connect the cap sensor hose (gray) to the adapter.

### Connect the Work Cable

To connect the work cable to the MAX200, connect the work cable (black) to the bulkhead adapter. (See Figure 3-7.)

## Grounding

To ensure proper operation, personal safety, and to reduce emission of radio frequency interference, the properly ground the MAX200 as follows:

### Work Table

Connect the work table to a high-quality earth ground within 20 feet of the table. A suitable ground consists of a solid copper rod of at least 1/2-inch diameter driven to a depth of at least 8 feet into the earth below the permanent moisture level.

### Work Clamp

1. Attach the work clamp to the workpiece or to the work table. Make sure that the work clamp and the workpiece or work table make good metal-to-metal contact.
2. Do not attach the work clamp to the portion of the workpiece being cut away (see Figure 3-8).
3. For more information, refer to the National Electrical Code, Article 250, Section H, *Grounding Electrode System* or other appropriate code.