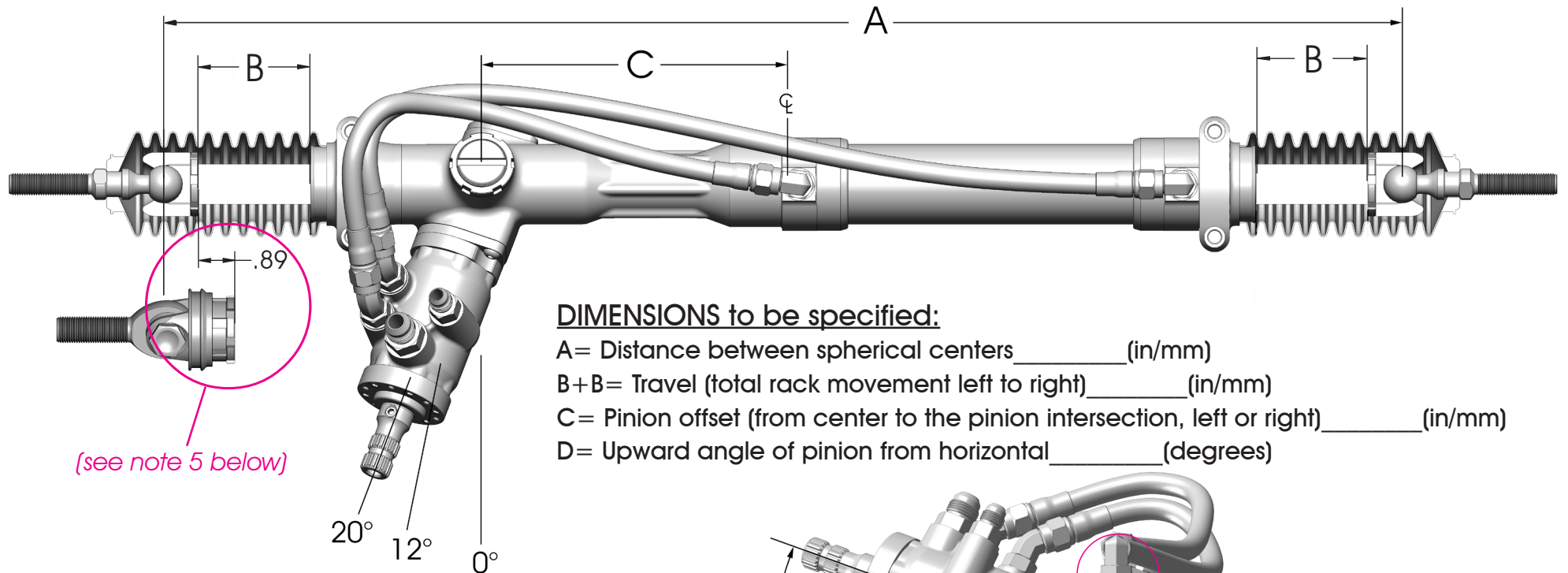# Data needed to model a type CF custom steering rack
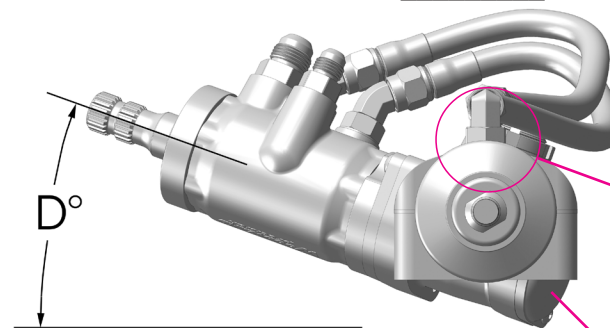
(Scan and return completed form to tech@woodwardsteering.com)

(see note 5 below)

20°   12°   0°

DIMENSIONS to be specified:

A= Distance between spherical centers_____(in/mm)

B+B= Travel (total rack movement left to right)_____(in/mm)

C= Pinion offset (from center to the pinion intersection, left or right)_____(in/mm)

D= Upward angle of pinion from horizontal_____(degrees)

D°

Note: cylinder ports must be oriented within 15° of vertical. If not possible, bleeders will be required.

The mounting clamps can be at any angle, but unless requested otherwise will be modeled as if bolted to a horizontal surface.

BASIC CONFIGURATION (circle one):

1. **Left hand** or **right hand** drive
2. **Front steer** or **rear steer** (rack *ahead of* or *behind* the front wheels)
3. **Pinion angle** (left or right); **0**, **12** or **20** degrees
4. **Gear ratio** (distance the rack must move in one turn);
the choices are (inches/mm): **1.57/40, 1.83/47, 2.09/53, 2.36/60, 2.62/67, 2.88/73 or 3.14/80**
5. **Monoball** or **Clevis** rack ends *(note: for a given length A, clevises occupy more of distance B than monoballs. To provide clearance for the same rack travel, the housing of a clevis rack must be correspondingly shorter).*

Additional information that is usually helpful: car weight (with driver and fuel), type of racing, expected maximum tie rod force, and special factors such as driven front wheels. Note that the hose ports of the servovalve can be oriented in 60° steps to clear obstacles such as chassis members. Unless requested otherwise, we will model the rack with hoses routed around the outside as above.