

# RACE TECH

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## SWINGARM GEOMETRY for CUSTOM SHOCKS

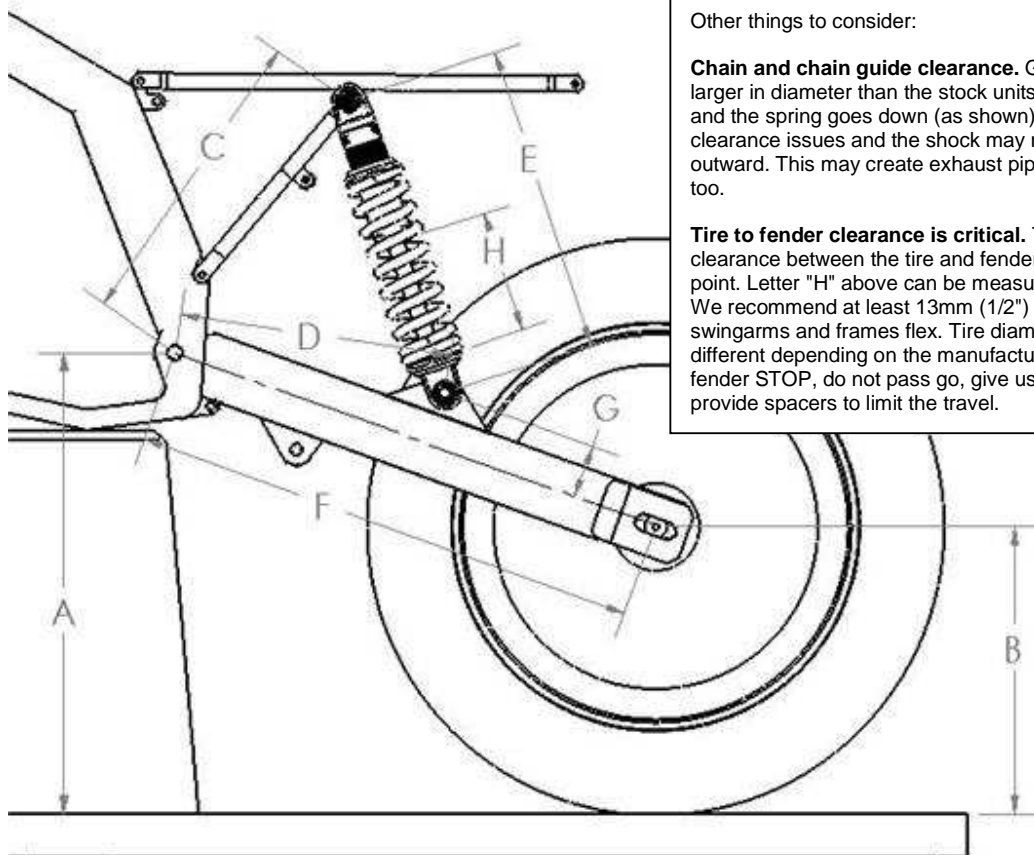
<SwingarmGeometry.doc> P Thede © 4-28-09

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ St \_\_\_\_\_ Zip \_\_\_\_\_ Country \_\_\_\_\_  
 Phone \_\_\_\_\_ Email \_\_\_\_\_  
 Year \_\_\_\_\_ Make \_\_\_\_\_ Model \_\_\_\_\_  
 Bike Weight \_\_\_\_\_ lbs / kg Rider Weight (without gear) \_\_\_\_\_ Additional Unusual Gear Weight \_\_\_\_\_  
 Non-standard Vehicles - Front/Rear LaidenWeight Bias (rider on board) \_\_\_\_\_  
 Type of Riding \_\_\_\_\_ Skill Level \_\_\_\_\_

Geometry - All measurements in millimeters please.

- A \_\_\_\_\_ Swingarm Pivot to Ground (bike level)
- B \_\_\_\_\_ Rear Axle to Ground (bike level)
- C \_\_\_\_\_ Swingarm Pivot to Upper Shock Mount
- D \_\_\_\_\_ Swingarm Pivot to Lower Shock Mount
- E \_\_\_\_\_ Extended Shock Length (fully extended)
- F \_\_\_\_\_ Swingarm Length (swingarm pivot to axle in middle position)
- G \_\_\_\_\_ Lower Shock Mount to Swingarm Centerline (perpendicular to swingarm axis)

- H \_\_\_\_\_ Collapsed Shock Length (fully collapsed, no bumper – must have tire to fender/frame clearance)
- I \_\_\_\_\_ Upper Eyelet Bolt Diameter
- J \_\_\_\_\_ Upper Eyelet Width
- K \_\_\_\_\_ Lower Eyelet Bolt Diameter
- \* Lower Eyelet or Clevis (circle)
- L \_\_\_\_\_ Lower Eyelet/Clevis Width
- M \_\_\_\_\_ Maximum Wheel Travel Allowed



Other things to consider:

**Chain and chain guide clearance.** G3-S Shocks are often larger in diameter than the stock units. The body end goes up and the spring goes down (as shown). This can cause clearance issues and the shock may need to be spaced outward. This may create exhaust pipe clearance problems too.

**Tire to fender clearance is critical.** There MUST always be clearance between the tire and fender at the fully collapsed point. Letter "H" above can be measured without the shock on. We recommend at least 13mm (1/2") clearance minimum as swingarms and frames flex. Tire diameters will also be different depending on the manufacturer. If the tire hits the fender STOP, do not pass go, give us a call and we will provide spacers to limit the travel.