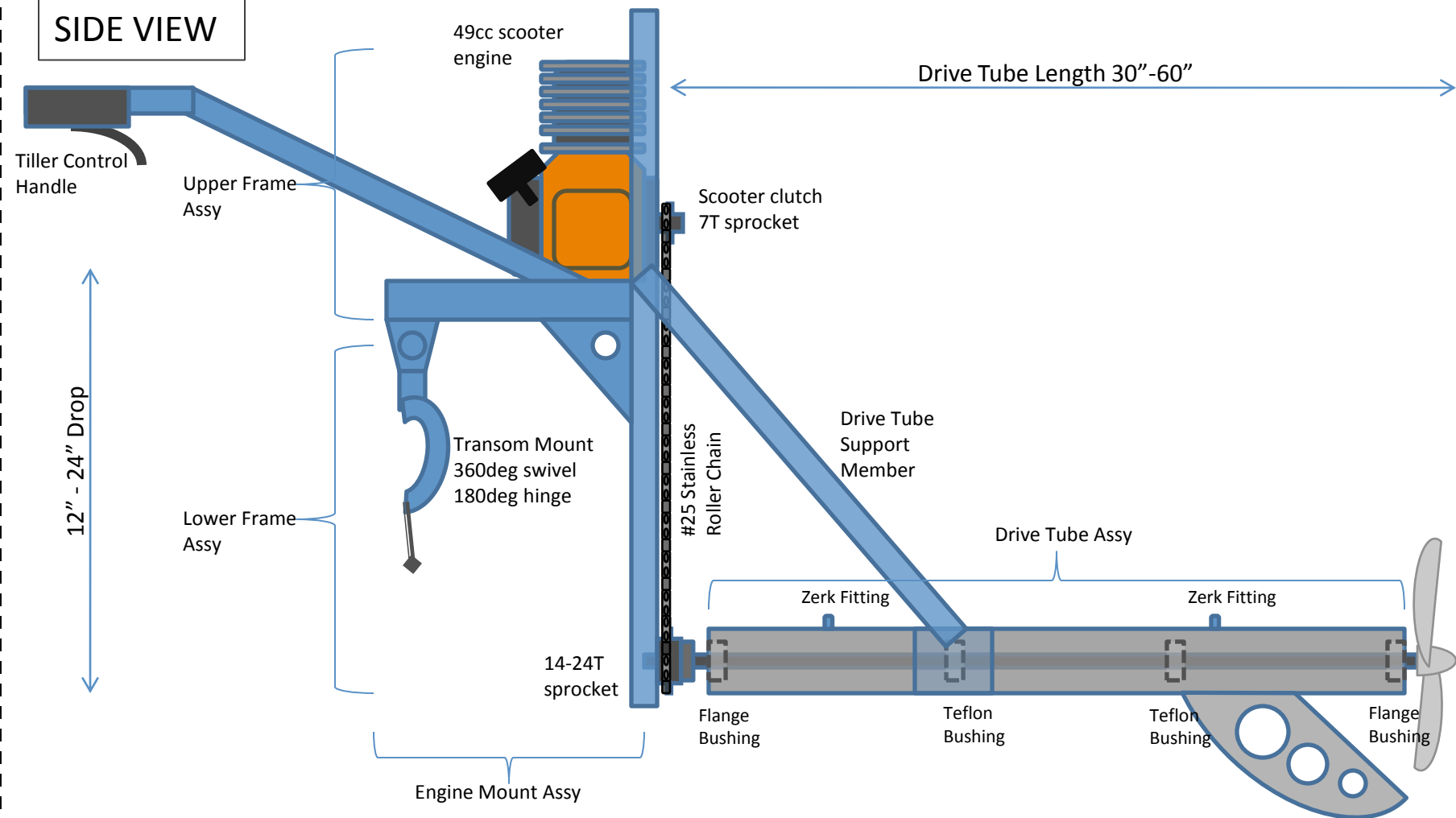


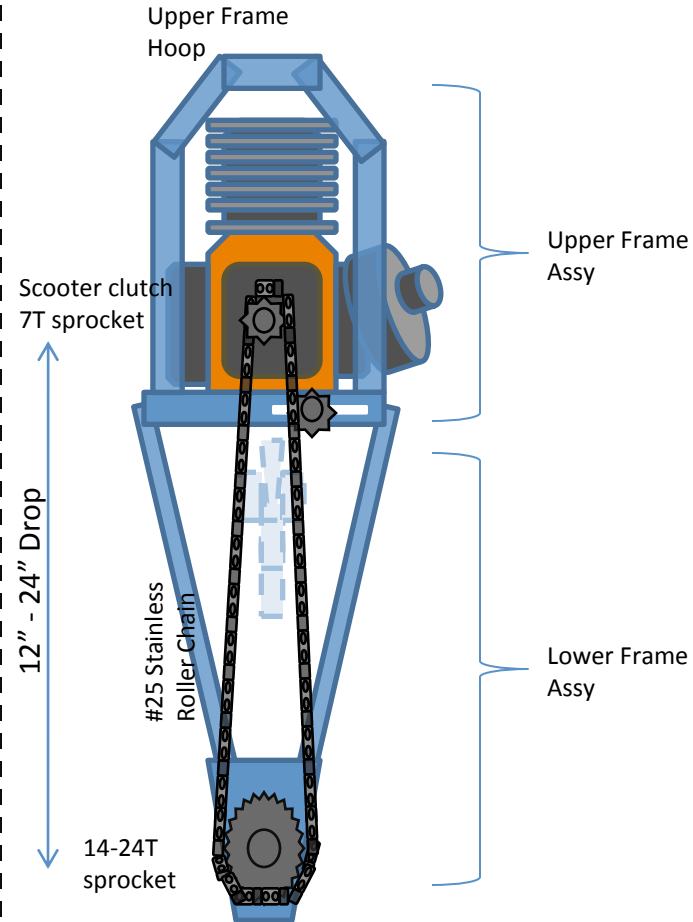
SIDE VIEW



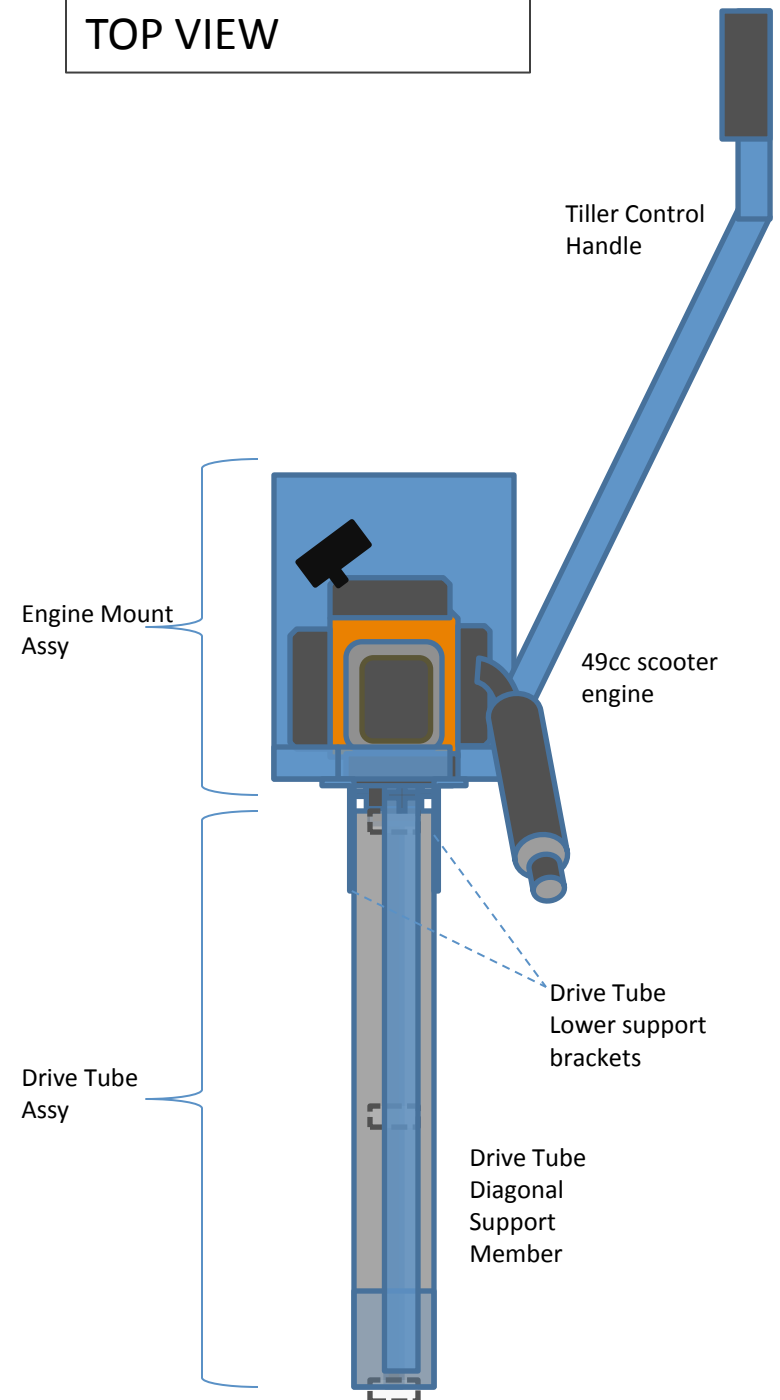
NOTES:

1. Frame constructed of $\frac{3}{4}$ "-1" Aluminum square stock
2. Drive Tube of 1"-1-1/4" DOM or zinc-coated steel conduit
3. Marine grease, with fittings on drive tube for lubrication
4. Drop is easily scaled up/down for transom design
5. Drive tube length scales up/down easily for transom height
6. 49cc-52cc engine from scooter with integral centrifugal clutch and #25 chain sprocket (6-7T is standard)
7. Lower shaft sprocket should be 14-24T to achieve 1:2-1:3 drive ratio
8. Propeller is ideally 6.5-7" diameter with 1" pitch
11. Engine mount swivels 180deg on horizontal and 360deg on vertical axis
12. Motor may be easily rotated to face forward or rearward for different propellers
13. Drive shaft ($\frac{3}{8}$ " or $\frac{1}{2}$ " steel rod) is supported by teflon bushings (self-lubricating) and sealed with flange bearing on each end
14. Shaft collar locks driveshaft into tube on engine side only
15. Propeller attached using pin in shaft and nut/lock washer on end of shaft (pin should be point of failure in case of snagged prop to save engine)
16. Design considerations are 1. Performance, 2. Weight, 3. Portability
17. Chain and sprocket safety cover not depicted for clarity

REAR VIEW (FRAME)



TOP VIEW



NOTES:

1. Idler pulley maintains chain tension, mounted to slot in upper frame
2. Tension adjusted via bolt/nut running through slot in frame, idler pulley freewheels on bolt shaft, nut locks the pulley bolt onto the slot when in position
3. Upper frame hoop acts as mount and carrying handle
4. Drive Tube diagonal support member runs from upper frame to drive tube center and also serves as carrying handle
5. Lower sprocket mounts to drive shaft using allen key and slot
6. Drive tube also braced to lower frame member via brackets (aluminum angle)