A Brief Checklist on Dimensioning

1. **Place dimensions on the view that best describes the shape.** (i.e. Dia. and location of holes in circular view.)

2. Place dimensions **between views** and **outside object** where possible.

3. Only use 3 place dimensions where parts need to fit together (hole centers) or the fit is important to your design in some way.

4. Try to dimension your part so that it will be **easy to manufacture.** Dimension from surfaces so that you won’t have to do a lot of adding and subtracting.

5. **Avoid** dimensioning to **hidden lines** where possible.

6. **Dimension holes** and slots in the **circular view** with a leader, a diameter and the abbreviation DIA or the diameter symbol inserted by AutoCAD. The leader is directed toward the center of the hole with an arrowhead touching the circle, and is placed at an angle as close to 45 degrees as possible.

7. Holes should be located in the circular view (not the side view!) and from finished edges or from other centerlines. **Never dimension to the edge of a hole,** always to the center.

8. Dimension cylinders by **length** and **diameter** on the same (side) view.

9. **Dimension any curved features <360 degrees** using radius, not diameter, in the view where the curve shows.

10. **Overall dimensions** from end to end should be shown (height, width, depth) except on parts having rounded ends, where the overall dimension can be shown as a reference dimension (REF).

11. Dimensions should **not be repeated** in another view.

12. On a row of dimensions, one of the dimensions is omitted. (Can be calculated by subtracting sum of other dimensions from overall.)

13. Dimension lines do not cross object lines, extension lines or other dimension lines. Extension lines may cross object lines and extension lines.

14. Notes are used to provide information and dimensions. Note letters are about .12 inches high. The notes are placed horizontally on the sheet. Leaders from notes (DIMENSION-LEADER in AutoCAD) should be placed at an angle as close to 45 degrees as possible.

15. Center lines may be used as extension lines.

16. **Never assume that because a part looks symmetrical, you don’t have to dimension it completely.**

17. **For holes or fillets that are repeated,** i.e. 6 identical holes in the same view, or 4 fillets on the corners of a part, **don’t dimension each hole,** dimension one and add a note: **6 PLS TYP** after the diameter value. **This does not apply to symmetrical features, or location dimensions!**