VOLUME = 8.0865923e+05 MM^3
SURFACE AREA = 3.0310356e+05 MM^2
AVERAGE DENSITY = 2.8238361e-06 KILOGRAM / MM^3
MASS = 2.2835211e+00 KILOGRAM
CENTER OF GRAVITY with respect to DOOSAN_MOUNT_ORIGIN coordinate frame:
X   Y   Z   -2.7197381e+01 -4.8674567e-01 8.2216345e+01 MM

INERTIA with respect to DOOSAN_MOUNT_ORIGIN coordinate frame: (KILOGRAM * MM^2)

INERTIA TENSOR:
Ixx Ixy Ixz 2.4597522e+04 -1.0388161e+02 6.5839595e+03
Iyx Iyy Iyz -1.0388161e+02 3.0274954e+04 1.1633630e+02
Izx Izy Izz 6.5839595e+03 1.1633630e+02 9.9307971e+03

INERTIA at CENTER OF GRAVITY with respect to DOOSAN_MOUNT_ORIGIN coordinate frame:
 (KILOGRAM * MM^2)

INERTIA TENSOR:
Ixx Ixy Ixz 9.1614576e+03 -7.3651887e+01 1.4778482e+03
Iyx Iyy Iyz -7.3651887e+01 1.3150316e+04 2.4953320e+01
Izx Izy Izz 1.4778482e+03 2.4953320e+01 8.2411412e+03

PRINCIPAL MOMENTS OF INERTIA: (KILOGRAM * MM^2)
I1 I2 I3   7.1527906e+03 1.0248447e+04 1.3151677e+04

ROTATION MATRIX from DOOSAN_MOUNT_ORIGIN orientation to PRINCIPAL AXES:
      -0.59284   0.80510   -0.01865
      -0.01063   0.01534   0.99983
       0.80525   0.59294   -0.00053

ROTATION ANGLES from DOOSAN_MOUNT_ORIGIN orientation to PRINCIPAL AXES (degrees):
angles about x y z -90.031   -1.069   -126.366

RADII OF GYRATION with respect to PRINCIPAL AXES:
R1 R2 R3 5.5967414e+01 6.6992552e+01 7.5890609e+01 MM

MASS PROPERTIES OF COMPONENTS OF THE ASSEMBLY
(in assembly units and the DOOSAN_MOUNT_ORIGIN coordinate frame)

   DENSITY   MASS   C.G.: X   Y   Z

                        MG0004A0   MATERIAL:
ERGAL70
         2.81000e-06 2.40560e-01 -1.95007e-02 -2.31204e-02 1.60294e+01
                        MG0001A0   MATERIAL:
ERGAL70
         2.81000e-06 2.03692e-01 -1.51726e-01 0.00000e+00 7.48294e+00
           V6-12_UNI5931-ISO4762   MATERIAL:
AISI304
         7.78000e-06 5.08125e-03 -1.76777e+01 -1.76777e+01 4.47776e+00
           V6-12_UNI5931-ISO4762   MATERIAL:
AISI304
         7.78000e-06 5.08125e-03 1.76777e+01 -1.76777e+01 4.47776e+00
           V6-12_UNI5931-ISO4762   MATERIAL:
AISI304
         7.78000e-06 5.08125e-03 1.76777e+01 1.76777e+01 4.47776e+00
           V6-12_UNI5931-ISO4762   MATERIAL:
AISI304
         7.78000e-06 5.08125e-03 -1.76777e+01 1.76777e+01 4.47776e+00
           V4-12_UNI5931-ISO4762   MATERIAL:
AISI304
         7.78000e-06 1.92215e-03 5.20150e-16 -5.40000e+01 8.49470e+00
           V4-12_UNI5931-ISO4762   MATERIAL:

```
AISI304
         7.78000e-06  1.92215e-03  4.67654e+01 -2.70000e+01  8.49470e+00
           V4-12_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  1.92215e-03  4.67654e+01  2.70000e+01  8.49470e+00
           V4-12_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  1.92215e-03  5.20150e-16  5.40000e+01  8.49470e+00
           V4-12_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  1.92215e-03 -4.67654e+01  2.70000e+01  8.49470e+00
           V4-12_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  1.92215e-03 -4.67654e+01 -2.70000e+01  8.49470e+00
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03 -1.30480e+01 -1.44913e+01  1.72038e+01
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03 -1.90739e+01 -4.05428e+00  1.72038e+01
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03 -6.02583e+00  1.85456e+01  1.72038e+01
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03  6.02583e+00  1.85456e+01  1.72038e+01
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03  1.90739e+01 -4.05428e+00  1.72038e+01
            V5-8_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  2.86274e-03  1.30480e+01 -1.44913e+01  1.72038e+01
                        MG0007A0            MATERIAL:
ERGAL70
         2.81000e-06  1.74077e-01 -2.02027e-02 -3.32289e-02  3.50016e+01
           DEWALT_TOP_CAP_VER_02            MATERIAL:
UNKNOWN
         2.05151e-06  9.57594e-02  4.06590e+00 -4.94013e-02  5.31177e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03 -1.30480e+01 -1.44913e+01  5.36452e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03  6.02583e+00  1.85456e+01  5.36452e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03 -6.02583e+00  1.85456e+01  5.36452e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03 -1.90739e+01 -4.05428e+00  5.36452e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03  1.30480e+01 -1.44913e+01  5.36452e+01
           V5-10_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  3.07831e-03  1.90739e+01 -4.05428e+00  5.36452e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04  3.71590e+01 -1.20000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04  3.71590e+01  1.20000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04  1.71590e+01 -3.20000e+01  4.59889e+01
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            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04 -1.78410e+01 -2.90000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04 -3.68410e+01 -1.20000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04 -3.68410e+01  1.20000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04 -1.78410e+01  2.90000e+01  4.59889e+01
            V3-4_UNI5931-ISO4762            MATERIAL:
AISI304
         7.78000e-06  6.79003e-04  1.71590e+01  3.20000e+01  4.59889e+01
                       DEWALT-DUMMY            MATERIAL:
ERGAL70
         2.81000e-06  8.52134e-01 -1.55475e+00  0.00000e+00  1.18916e+02
                        5AH_LI_ION             MATERIAL:
ERGAL70
         2.81000e-06  6.44363e-01 -9.48700e+01 -1.70000e+00  1.05725e+02
```