

## THE DANA AIR COMPRESSOR

DIRECTIONS for overhauling the original factory supplied twin cylinder air compressor commonly known as the "Dana". The Dana company is no longer a parts supplier.

### SEQUENCE OF DISASSEMBLY

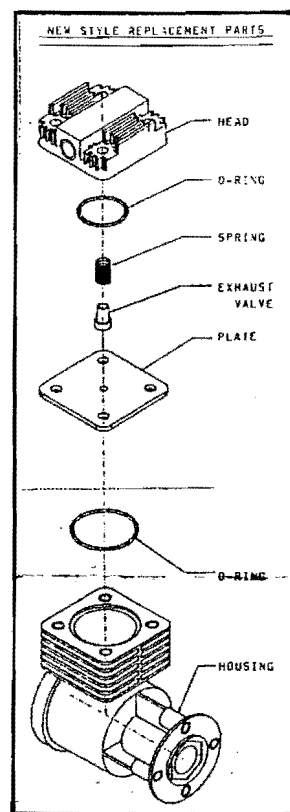
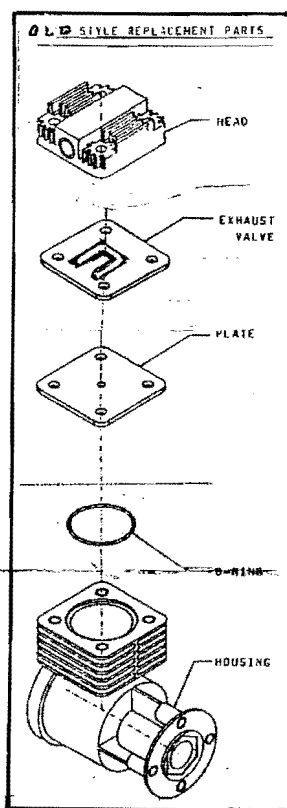
1. Remove the blue plastic cover and slide off the drive belt.
2. Remove the 4 machine screws from each head with a 5/16" socket.
3. Remove the clips holding in white plastic air intakes.
4. Squeeze the black foam filters to remove from inside air intakes. DO NOT REMOVE METAL RING (star washer) holding filters in. Many times the foam filters have disintegrated and are missing.
5. Hold the crank shaft counter balance from turning and remove the crank pin with a 5/32 Allen Wrench, utilizing the holding tool. DO NOT hold the outside white colored staked pulley or you will probably unscrew the crankshaft from the counterweight and the crank pin will now be very difficult to remove.
6. Remove both piston and rod assemblies.
7. Use 400 to 600 grit emory cloth or paper and gently clean the glaze from each sintered bronze oil lite cylinder sleeve. NEVER go up and down as the piston does, but round and round gently. This will allow the new moly-bronze, teflon coated single piston ring to seat quicker.
8. Blow all grit from the assembly and wipe clean.
9. Try and wiggle the small cog pulley on the electric motor shaft. Many times the brass bushing is worn out and the shaft is somewhat loose. I can install a new bushing and set the end play if needed.

### SEQUENCE OF RE-ASSEMBLY

IMPORTANT: DO NOT oil or grease any part of this compressor. The crankshaft and rod needle bearings are pre-greased. If you have to remove the crankshaft for any reason and wish to wash the bearings, apply a very thin coat of waterproof cling grease - same for rod bearings. DO NOT OVER GREASE.  
Lubriplate #L0085-098 works well.

1. Install the piston/rod assembly carefully. Make sure the writing on the con-rod needle bearing faces out so you can see it after assembly. This gives correct clearance on counter balance side.
2. Inspect the old crank pin for surface galling or wear. Discard if any defects are found. I can send you a new one.
3. Install the crank pins, using Loctite #242 on the threads and tighten firmly. (NEVER, NEVER use any RED COLORED Loctite or other brand of red thread sealer as it will be virtually impossible to disassemble these parts again.)

4. Install the heads, "O" rings, and the head plates in sequence shown on the diagram that applies to your compressor. Diagram one shows the early style head, head gasket(exhaust valve), head plate, "O" ring, and cylinder. Make sure the center "U" tab points towards the exhaust port on each cylinder. Be sure the concave hole side of the headplate faces the piston. Tighten the 4 head machine screws in a criss-cross manner firmly after making sure the neopren "O" rings are carefully in their respective grooves.
5. Next, slide 2 hose clamps onto  $\frac{1}{4}$ " ID x  $\frac{1}{2}$ " OD air hose. Push each end of hose all the way onto the respective barbs. Next, slide the clamps to both ends and crimp.
6. Squeeze the new filters into the air intakes behind the star washers.
7. Before installing the intakes the compressor must be timed. This is easily done by moving one piston to top dead center, and the other one to bottom of its stroke. Now carefully turn compressor over and using a black felt pen mark a line across the white staked pulley teeth nearest each other.
8. Install the air intakes using the new black neoprene seals and the old clips.
9. Now turn the compressor over, align your two timing marks and slide the drive belt on. Keep the old belt as a spare. The belt should have approximately  $\frac{3}{8}$ " slack between drive pulley and right side crank pulley. If too loose the belt may jump a cog, changing the required timing.
10. Install the blue belt cover and give yourself a pat on the back for a job well done!



#### RETROSPECT

After installing the compressor back in the GMC check all air fittings with soapy water for leaks.

If your compressor should quit and you find a broken crankshaft or crankpin -- Don't fret, they are all available and easy to install. Just give me a call:

APPLIED GMC  
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1-800-752-7502