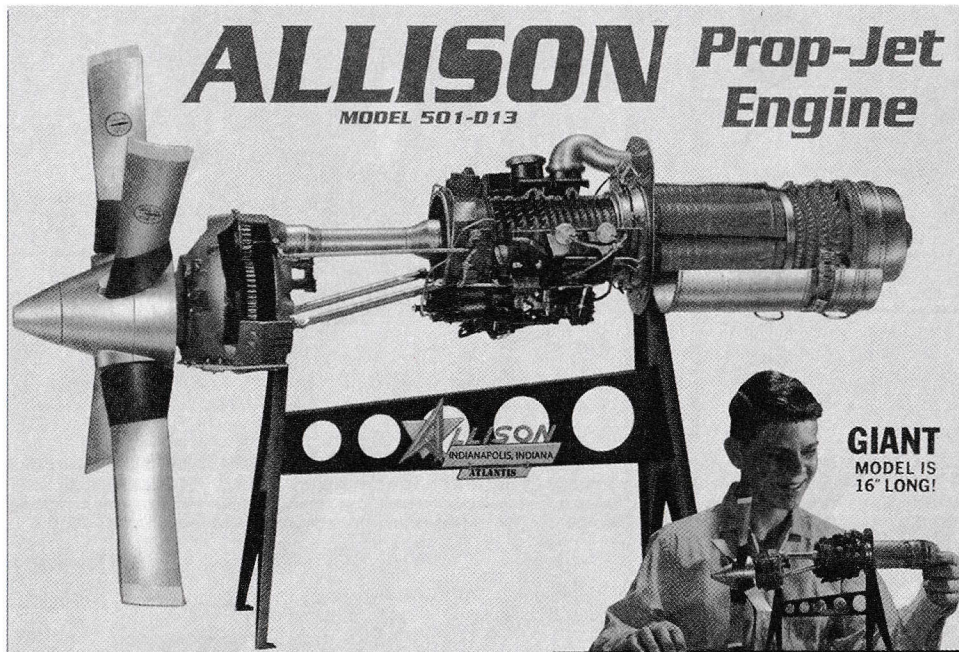


KIT H1551

MADE IN THE USA © 2019

Allison 501-D13 Prop Jet Engine

"Preserving the Past while Building the Future"



DECAL APPLICATION INSTRUCTIONS

1. Cut desired decal from sheet.
2. Dip decal in water for a few seconds.
3. Place wet decal on paper towel.
4. Wait until decal is movable on paper backing.
5. Place decal in position on model, face up and slide backing away.
6. Press out air bubbles with a soft damp cloth.
7. Milkyness that may appear is for better decal adhesion and will dry clear. Wipe away any excess adhesive.
8. Do not touch decal until fully dry.
9. Allow the decals 48 hours to dry before applying clear coat.
10. Decals are compatible with setting solutions or solvents.

NOTE: Decals are compatible with setting solutions or solvents.

THIS IS VERY IMPORTANT!

There are certain areas on your Atlantis Engine that can be lubricated to help parts run smoothly. These points are indicated in your assembly drawings. To lubricate use small amounts of machine oil or Vaseline.

READ THIS BEFORE YOU BEGIN

- * Study the assembly drawings.
- * Each plastic part is identified by a number.
- * Follow the assembly drawings carefully.
- * For better paint and decal adhesion, wash the plastic parts in a mild detergent solution. Rinse and let air dry.
- * Check the fit of each piece before cementing in place.
- * Use only cement for polystyrene plastic.
- * Scrape plating and paint from areas to be cemented.
- * Allow paint to dry thoroughly before handling parts.
- * Any unused parts may be discarded.

LISEZ CEÇI AVANT DE COMMENCER

- * Étudiez les plans d'assemblage.
- * Chaque pièce de plastique est identifiée par un numéro.
- * Suivez attentivement le schéma de montage
- * Pour une meilleure adhésion de la peinture et de la décalcomanie, lavez les pièces en plastique dans une solution de détergent doux. Rincez et laissez sécher à l'air.
- * Vérifiez l'ajustement de chaque pièce avant de la coller en place.
- * Utilisez uniquement de la colle pour plastique au polystyrène.
- * Grattez toute peinture et le placage sur les régions à coller.
- * Laissez sécher la peinture complètement avant de manipuler des pièces.
- * Toute pièce non-utilisée peut être jetée.

LEA ESTO ANTES DE EMPEZAR

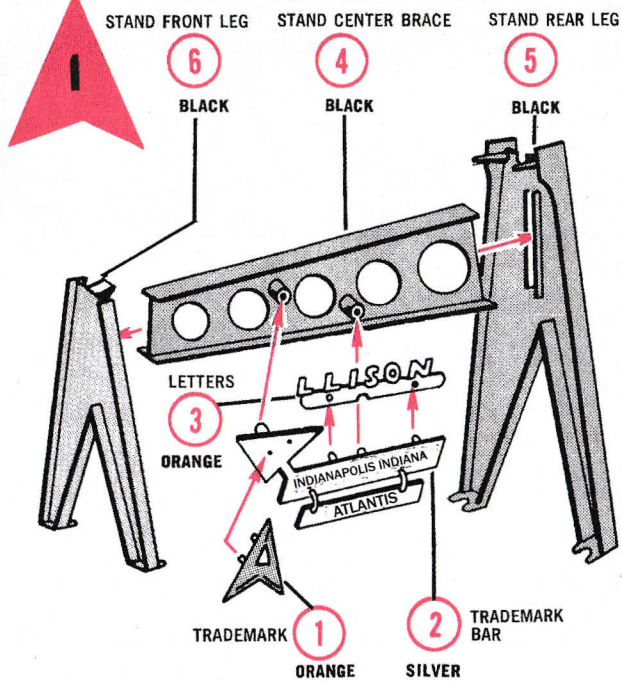
- * Estudie los dibujos de ensamblaje.
- * Cada parte plástica está identificada con un número.
- * Siga el dibujo de montaje con cuidado
- * Para mejor adhesión de pintura y calcomanías, lave las partes plásticas en una solución de detergente suave. Enjuague y deje secar al aire.
- * Verifique el encastrado de cada pieza antes de cementar en su lugar.
- * Use sólo cemento para plástico de poliestireno.
- * Raspe las placas y la pintura de las áreas a cementar.
- * Deje secar la pintura totalmente antes de manipular las partes.
- * Cualesquiera partes sin usar se pueden descartar.

READ THIS BEFORE STARTING YOUR MODEL

1. All parts are numbered for easy identification, or the numbers are engraved on the bar next to the part. **Carefully remove each part from it's runner bar only when that part is to be used.**
2. The color indicated next to part No. is the color the part is molded in. This will help you identify parts more easily.
3. Your model is molded in **four colors** and designed to eliminate painting of any parts.
4. The drawings are numbered for ease of assembly. Start with Step 1 and cement Part 1 to Part 2, etc.

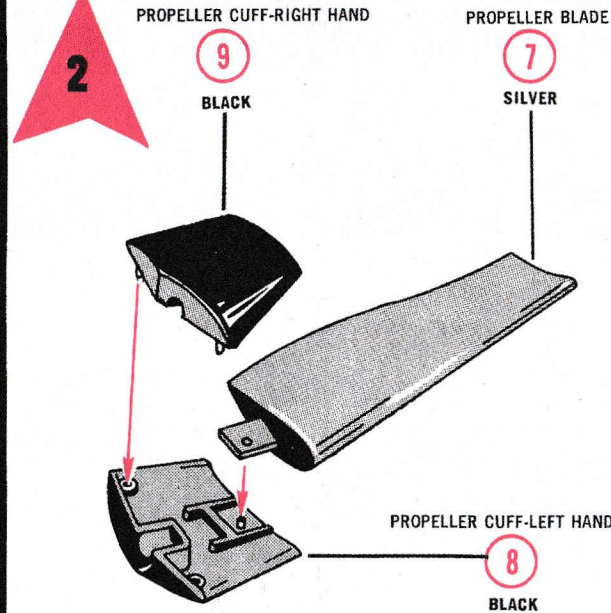
Enjoy your Allison 501-D13 Engine!

STAND ASSEMBLY

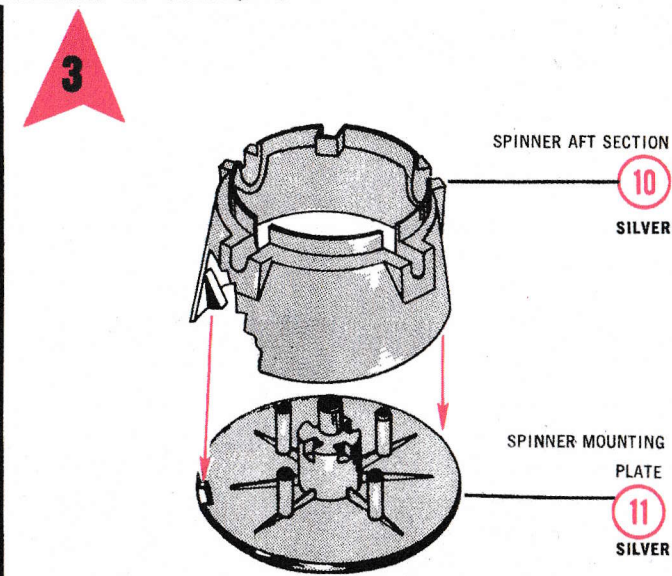


Cement 1, 2 and 3 together, let dry. Cement nameplate assembly to 4. Cement 4 to 5 and 6, as shown, set aside to dry.

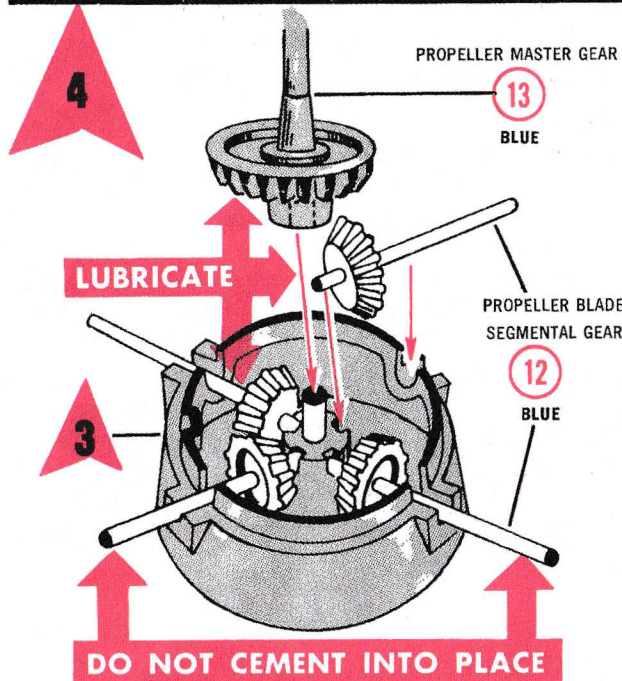
PROP ASSEMBLIES 2 THRU 6



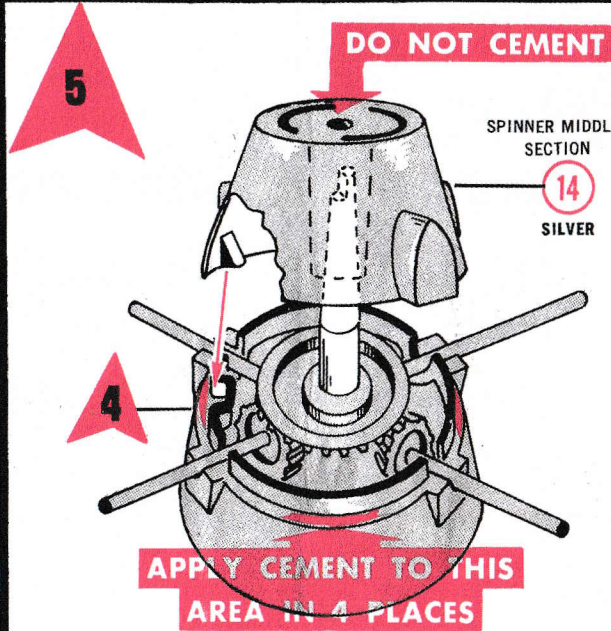
Cement 7 to 8. Cement 9 to 7 and 8. Repeat assembly for remaining (3) blades and set aside to dry.



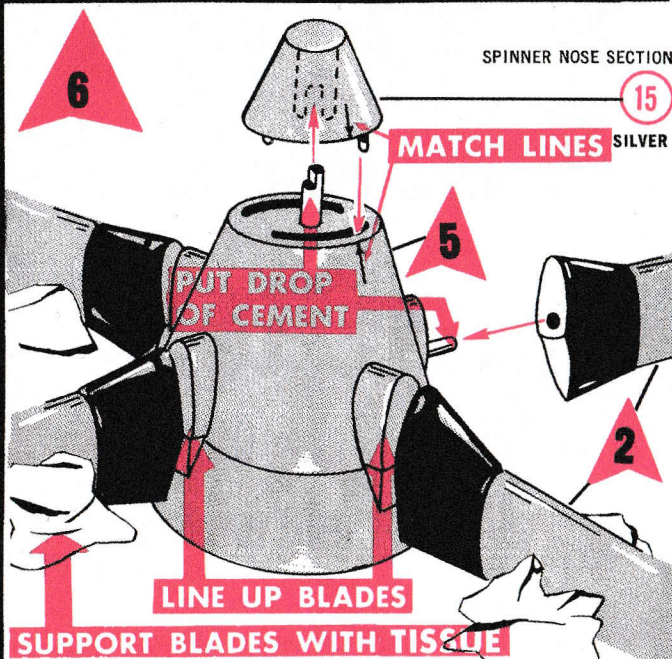
Cement 10 to 11 by locating tab on 10 into slot in 11, as shown. Set aside to dry.



Use a fine machine oil or vaseline to lubricate each part 12 and 13. Place, **DO NOT CEMENT** 12 into assembly 3, then place 13 into position.

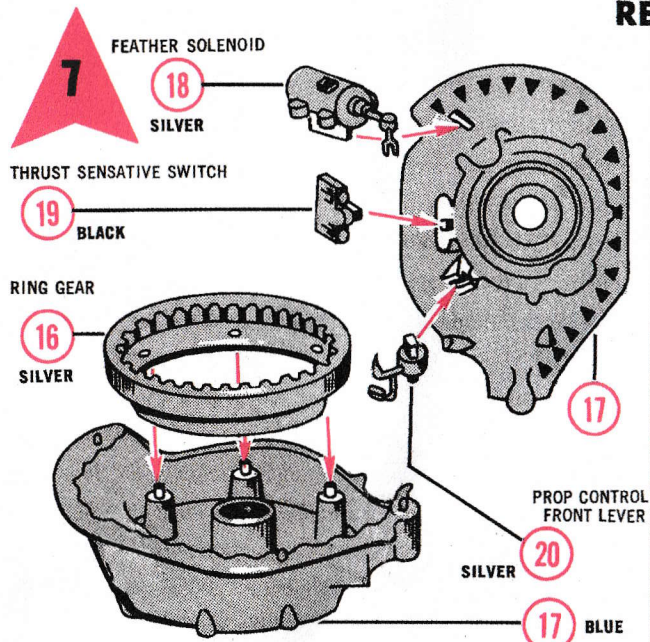


Apply cement to dark area shown only, **DO NOT LET CEMENT TOUCH LONG SHAFTS**. Place 14, onto assembly by locating tab into slot, as shown.

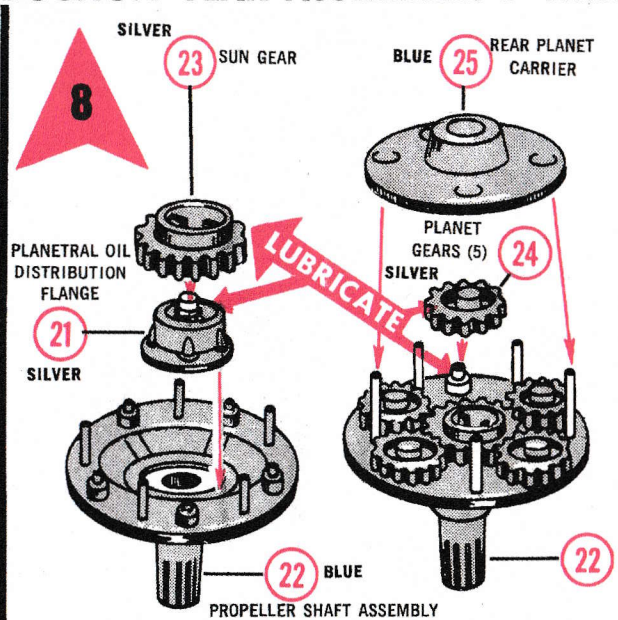


Put a drop of cement on vertical shaft on assembly 5 and press on part 15, making sure to line up match lines on part 15 and assembly 5 as shown. Now put a drop of cement on all 4 shafts and press on each prop blade, lining up blades with assembly 5. Set aside to dry.

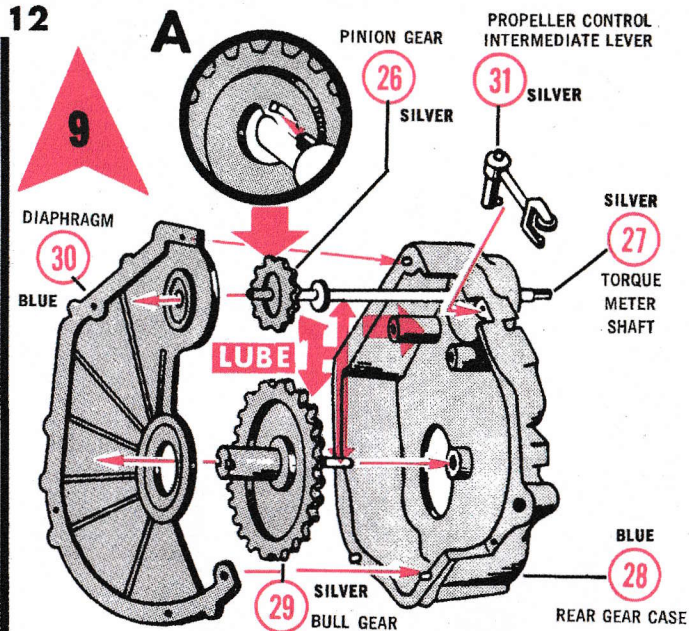
REDUCTION GEAR ASSEMBLIES 7 THRU 12



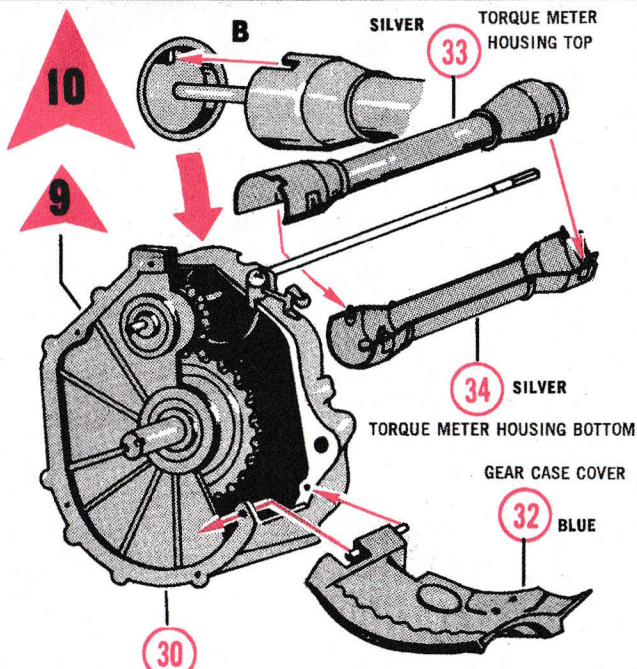
Cement 16 onto pins on 17. Turn 17 face down as shown and cement 18, 19 and 20 into place, set aside to dry.



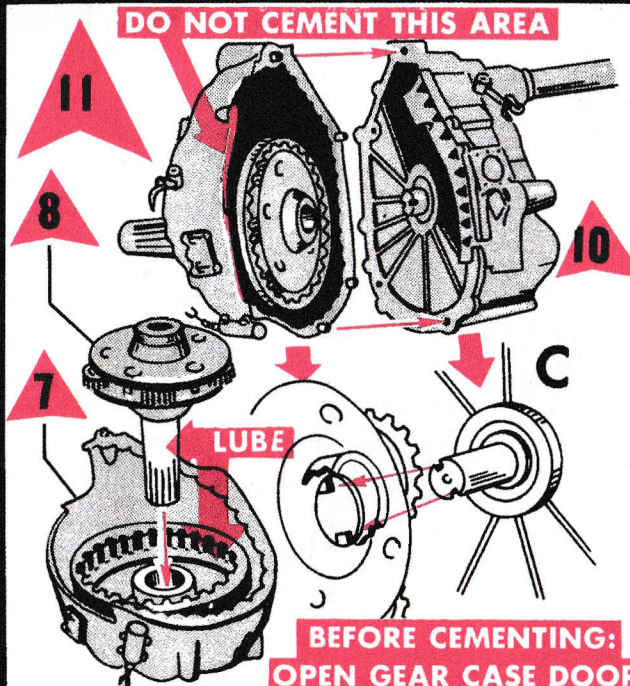
Cement 21 into 22. Place **DO NOT CEMENT** 23 onto 21, then place each 24 onto short pins on 22. Put a drop of cement on long pins and press 25 into place. Set aside to dry.



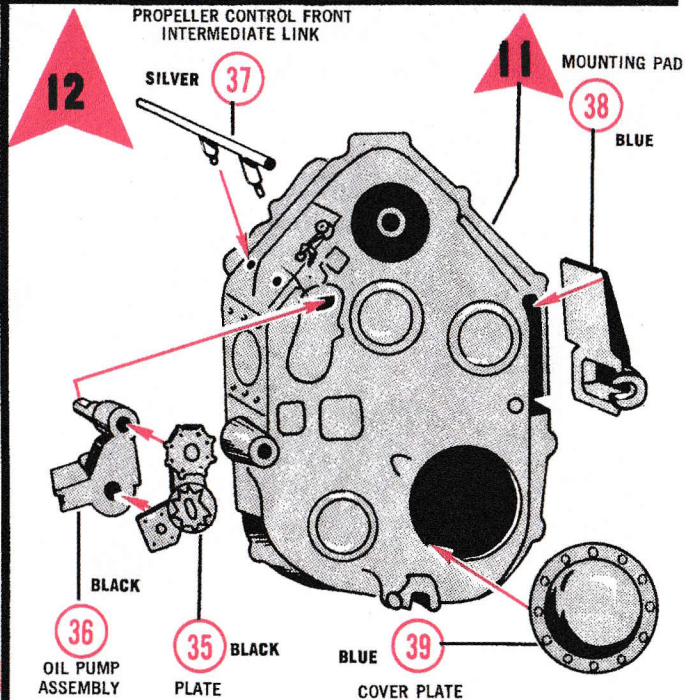
Cement 26 on 27, locate as shown in Drawing A. Slide 27 through 28. Slide 29 into 30. Cement 28 to 30. Finally, cement pin on 31 into hole in 28. **DO NOT** set this assembly aside to dry. Proceed to assembly 10.



Before cement dries, locate pins on 32 into holes in assembly 9 by spreading 30. Next, cement 33 to 34. Cement completed 33 and 34 to assembly 9, as shown in small Drawing B.

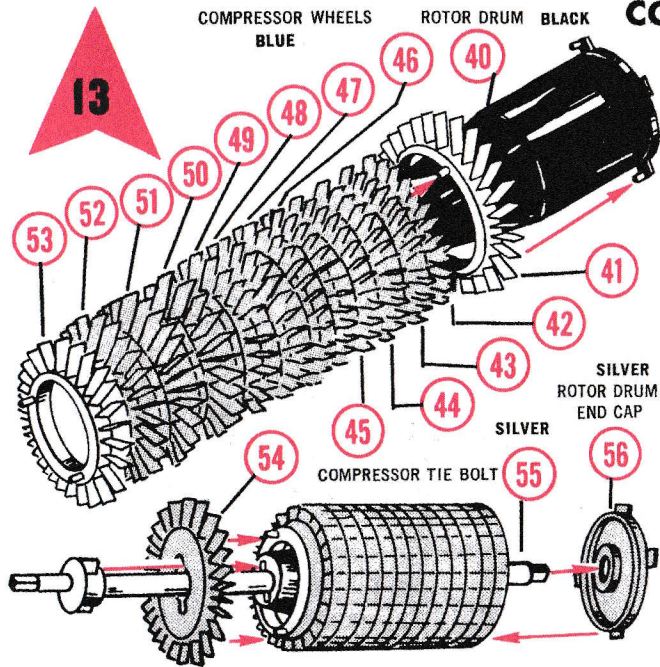


Place assembly 8 into assembly 7. Cement this assembly to assembly 10. Rotate shaft of assembly 8 to engage shaft in assembly 10, as shown in Drawing C. **DO NOT** let cement touch gear case cover.

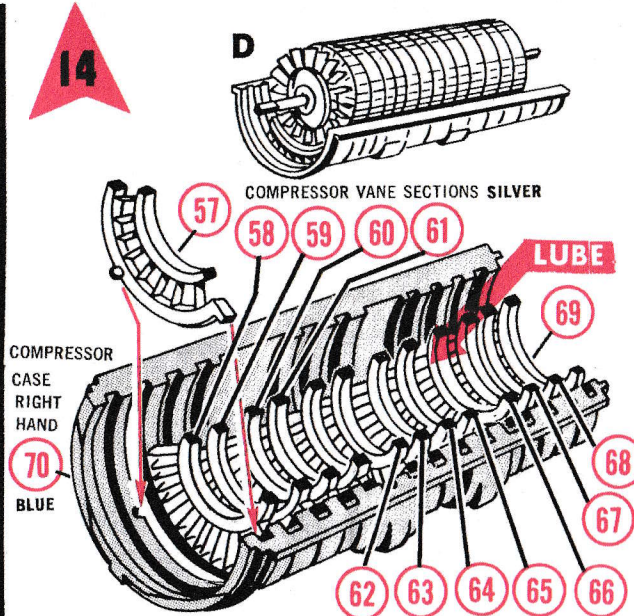


Cement 35 to 36. Cement completed 35 and 36 to assembly 11, as shown. Cement 37, 38 and 39 into place, as shown. Set aside to dry.

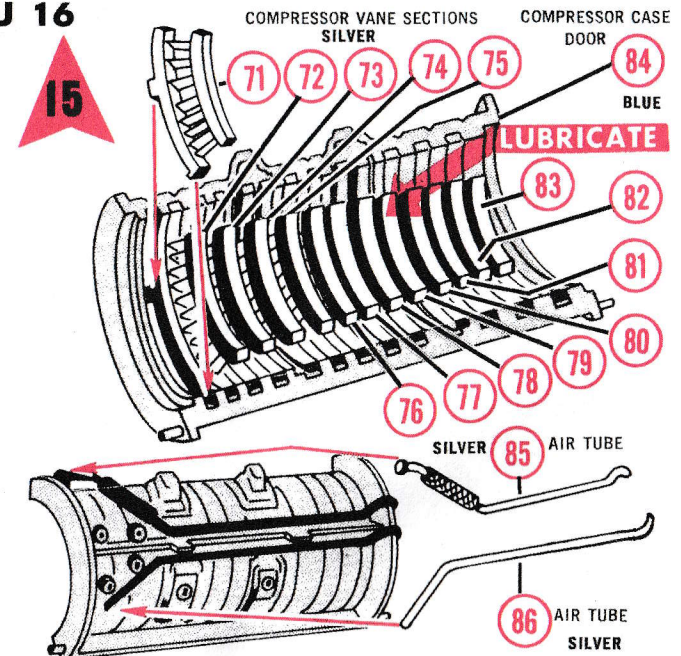
COMPRESSOR CASE ASSEMBLIES 13 THRU 16



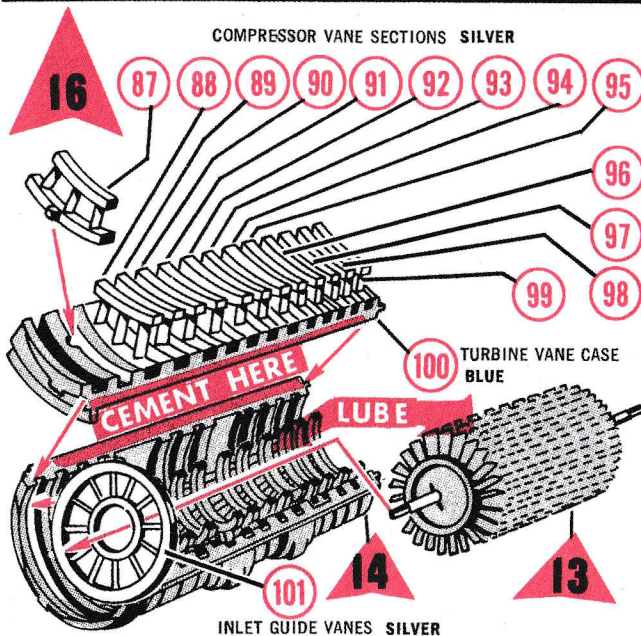
Cement 41 to 40. Next cement 42 through 53 onto 40 in the same way. Cement 54 to 55. Slide 55 through 40. Cement 54 to 53 and 56 to 40. Set aside to dry.



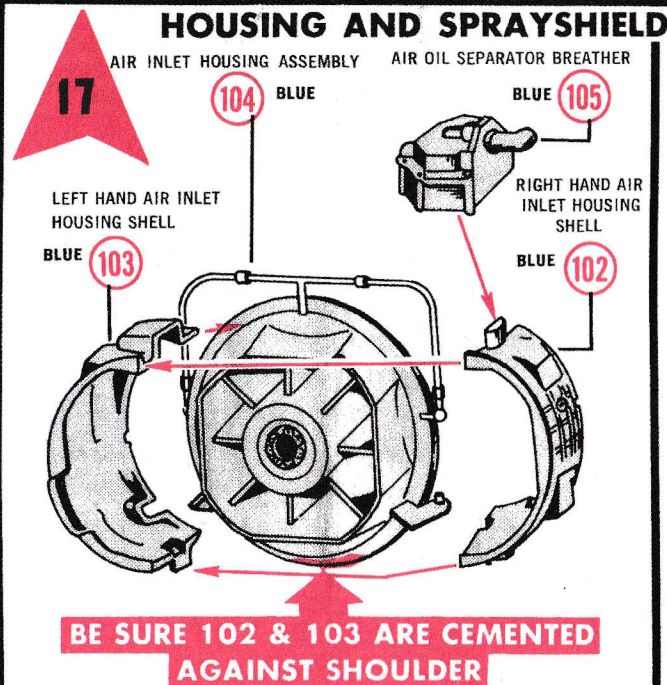
Start in second groove and cement 57 thru 69 into 70. Carefully place assembly 13 into position between vanes, as shown in small drawing D. Turning assembly slowly, align vanes properly to allow equal clearance for turning. Lube parts, then set aside to dry.



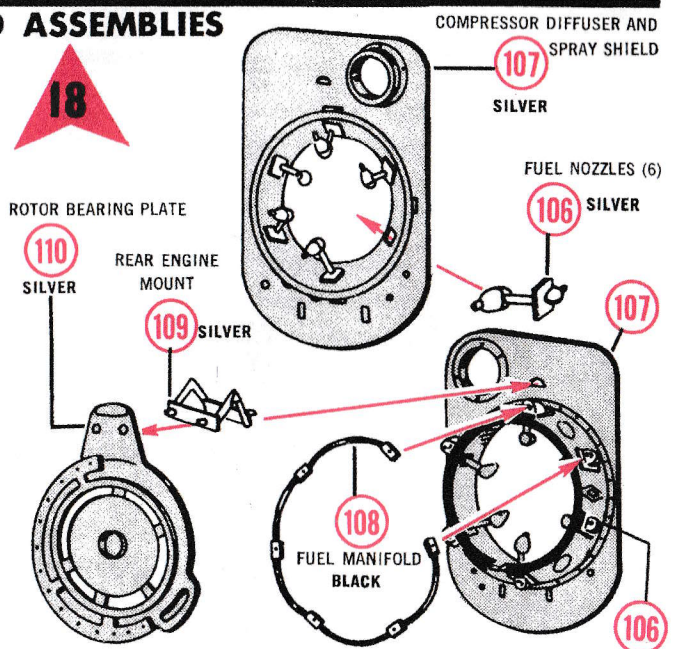
In the same way cement 71 thru 83 into 84. Use assembly 13 as a guide for alignment and clearance. Turn assembly around and cement 85 and 86 into place as shown in BLACK.



As before, cement 87 thru 99 into 100. Use assembly 13 as a guide for alignment and clearance. Slide 101 over shaft assembly 13 then cement 101 into assembly 14 as shown, locating 13 between vanes in assembly 14. Now cement assembly 16 onto assembly 14 as shown. Set aside to dry.



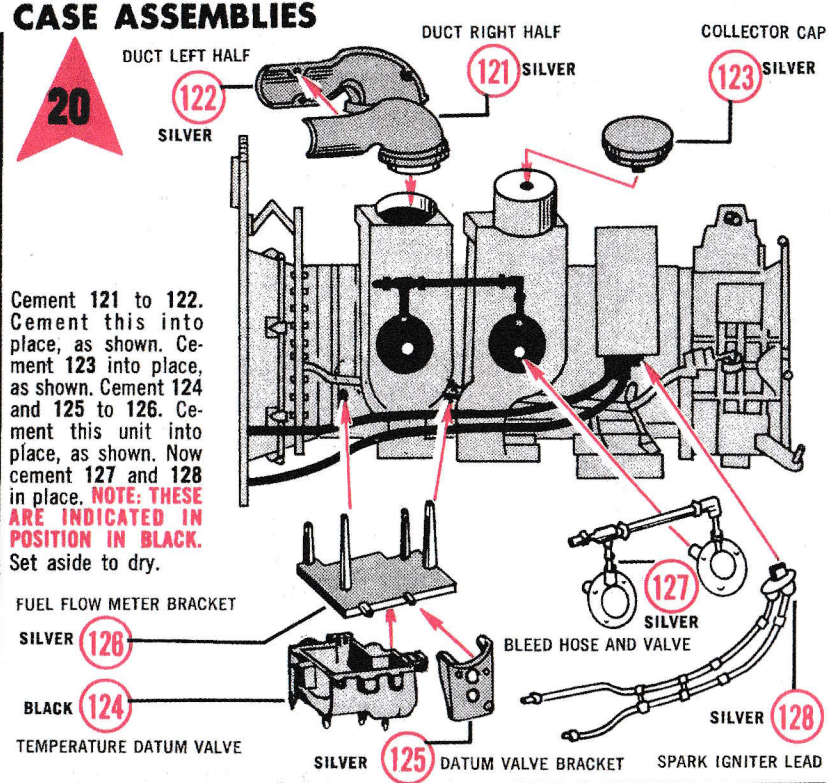
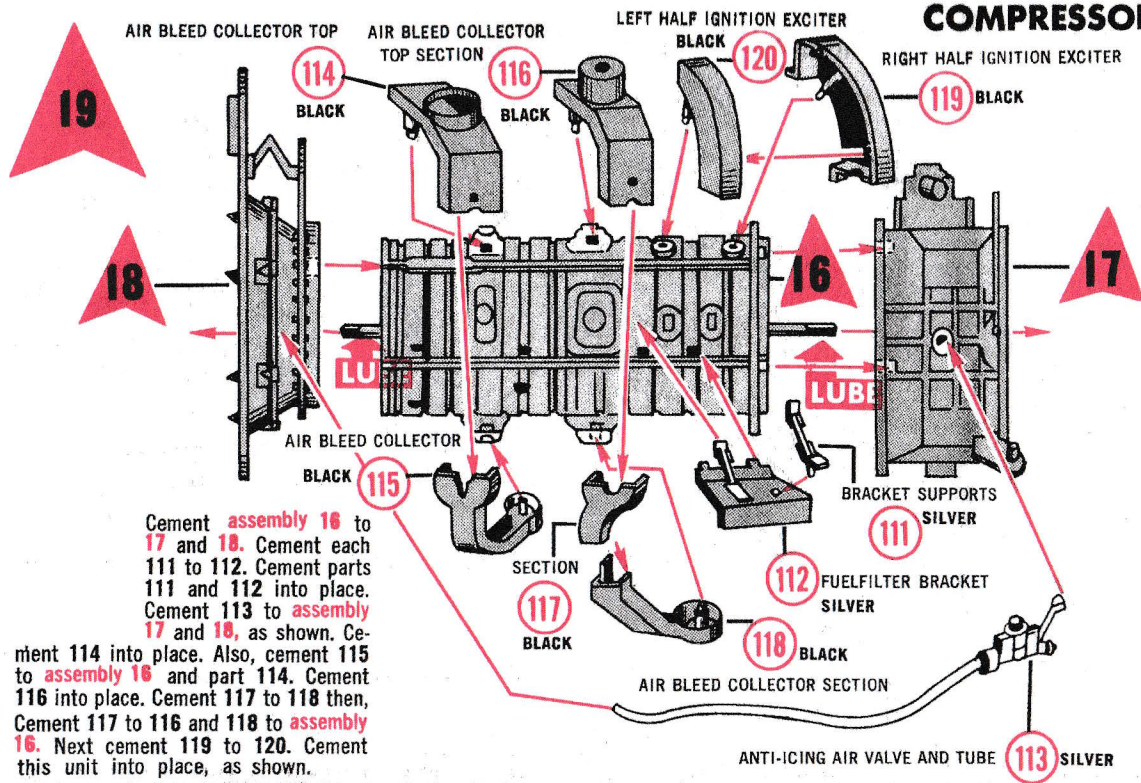
Cement 102 and 103 to 104. Cement 105 into place, as shown. Set aside to dry.



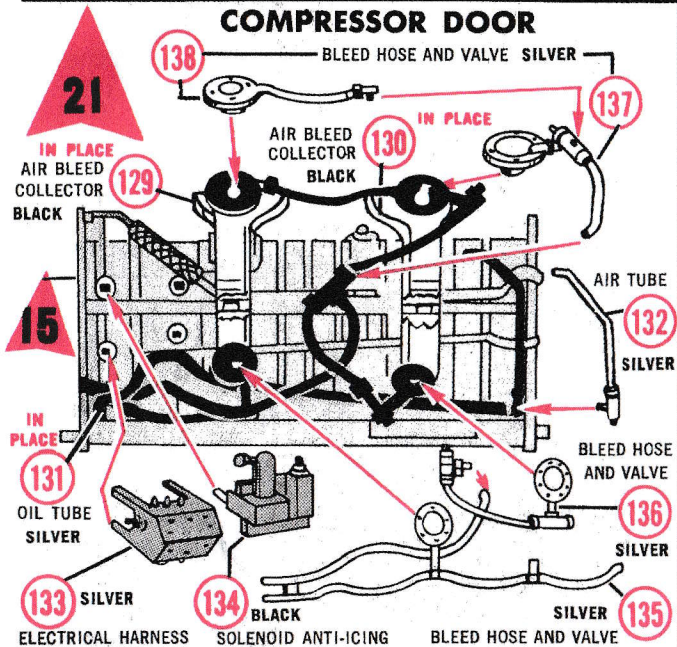
Cement (6) parts 106 to 107, as shown. Now turn 107 around and cement 108 to parts 106. Cement 109 to 110. Cement 109 and 110 to 107, as shown. Set aside to dry.

BE SURE 102 & 103 ARE CEMENTED AGAINST SHOULDER

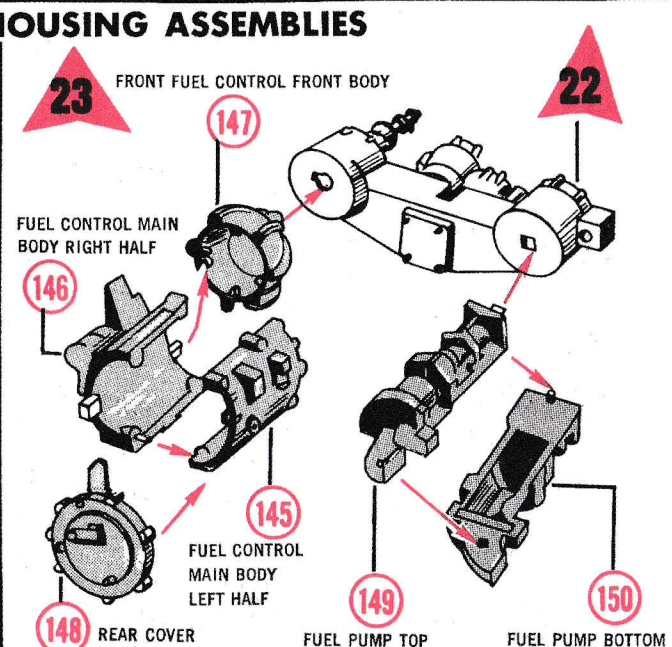
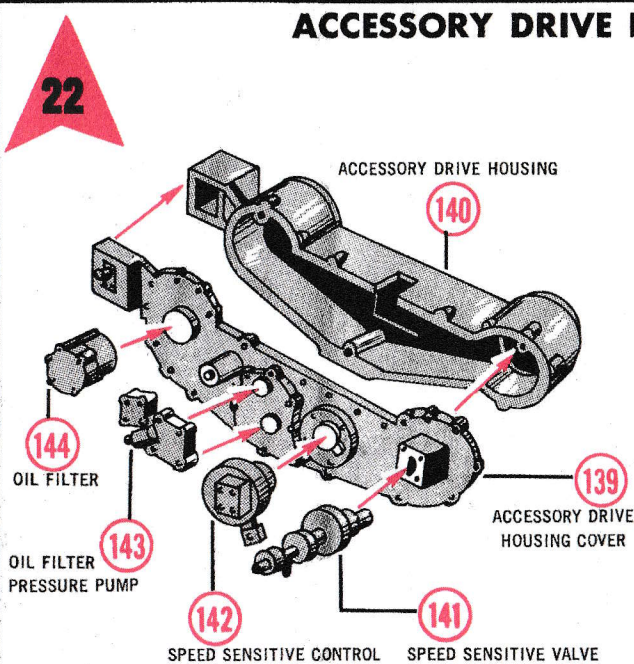
COMPRESSOR CASE ASSEMBLIES



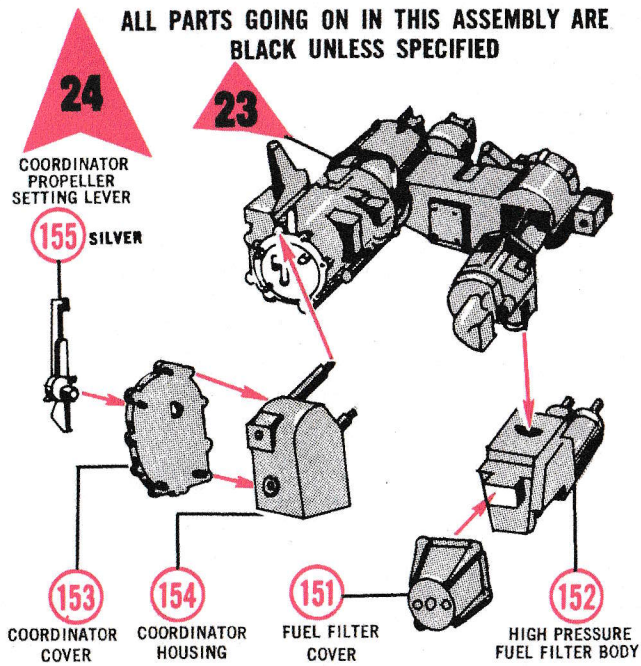
COMPRESSOR DOOR



ACCESSORY DRIVE HOUSING ASSEMBLIES

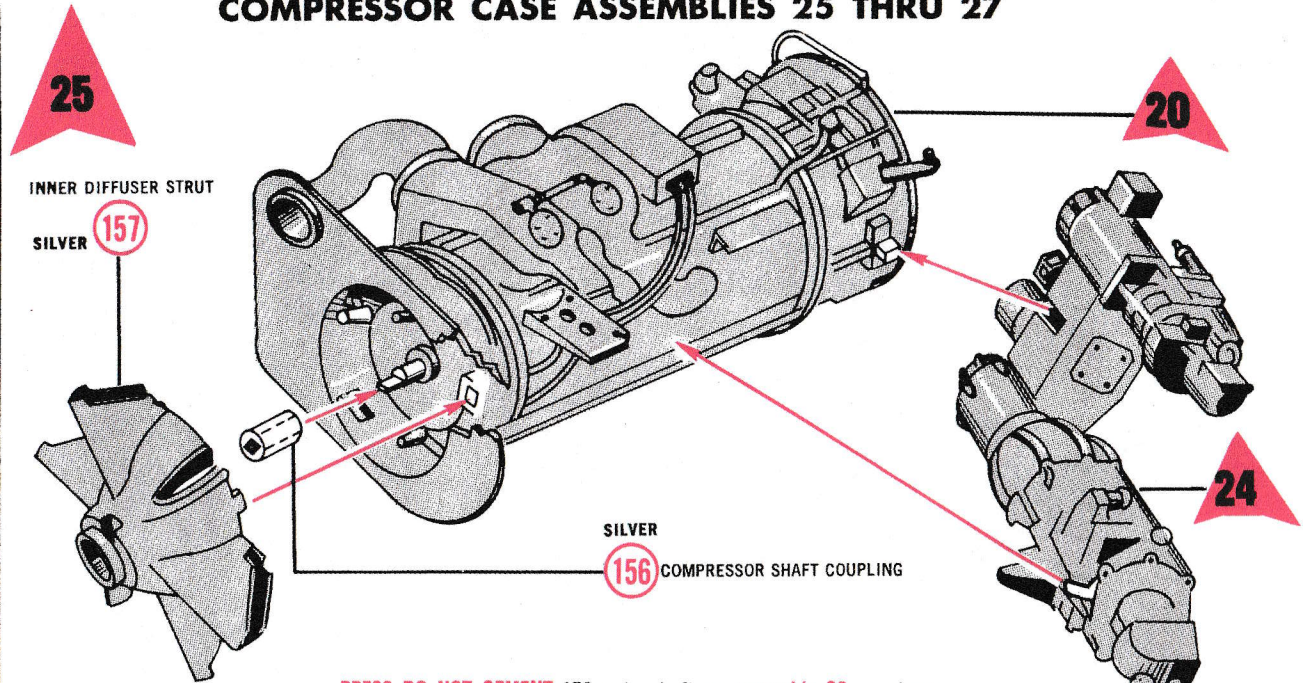


ALL PARTS GOING ON IN THIS ASSEMBLY ARE BLACK UNLESS SPECIFIED



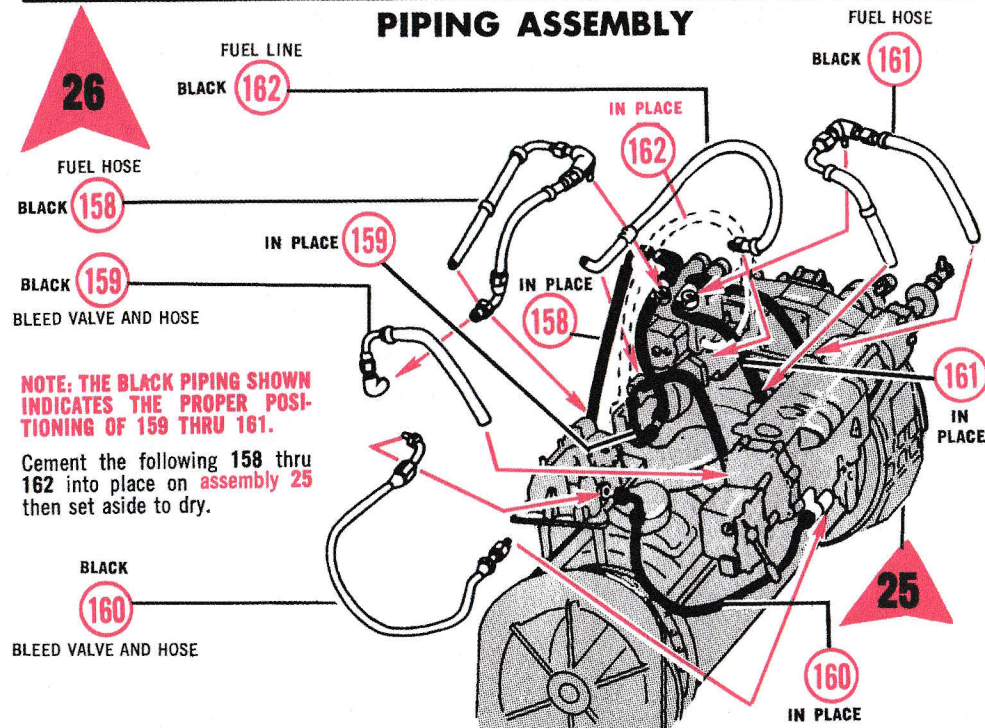
Cement 151 to 152, then cement this to **assembly 23**. Now cement 153 to 154. Next cement 155 to 153, as shown. Cement this unit into place then set aside to dry.

COMPRESSOR CASE ASSEMBLIES 25 THRU 27



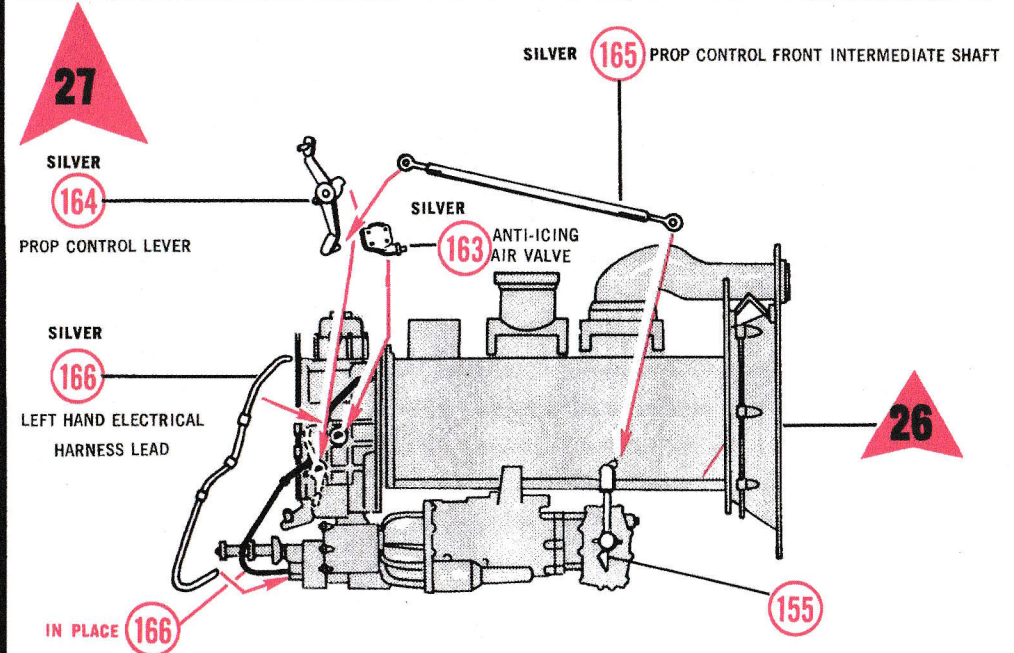
PRESS DO NOT CEMENT 156 onto shaft on **assembly 20**, as shown. Now cement 157 into place, pressing firmly to **assembly 20**. Cement **assembly 24** to **assembly 20**, as shown.

PIPING ASSEMBLY



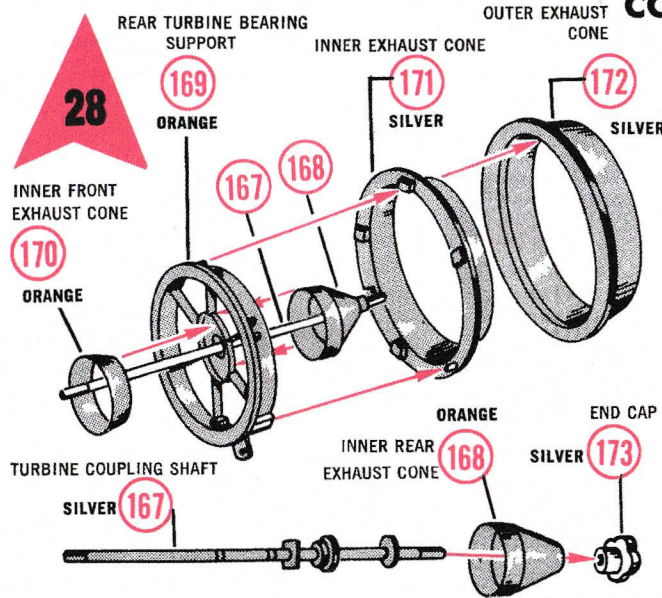
NOTE: THE BLACK PIPING SHOWN INDICATES THE PROPER POSITIONING OF 159 THRU 161.

Cement the following 158 thru 162 into place on **assembly 25** then set aside to dry.

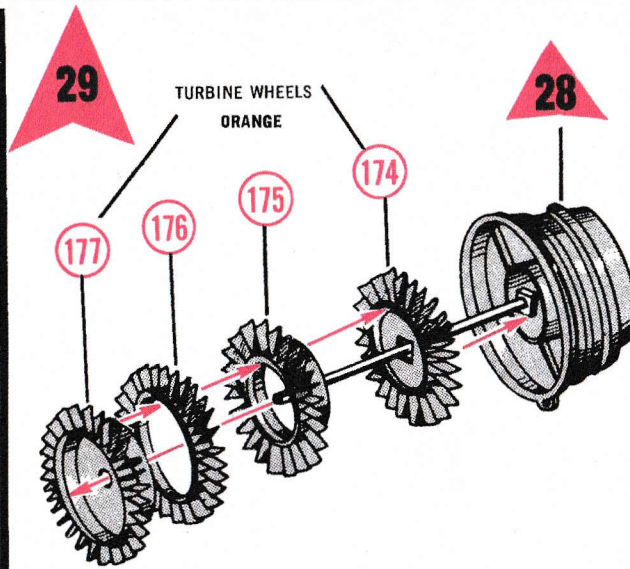


Cement 163 to **assembly 26**. Now cement 164 into place. Cement 165 to 164 and to lever, part 155, as shown. Finally cement 166 into place. Part 166 is shown in position in **BLACK**. Set aside to dry.

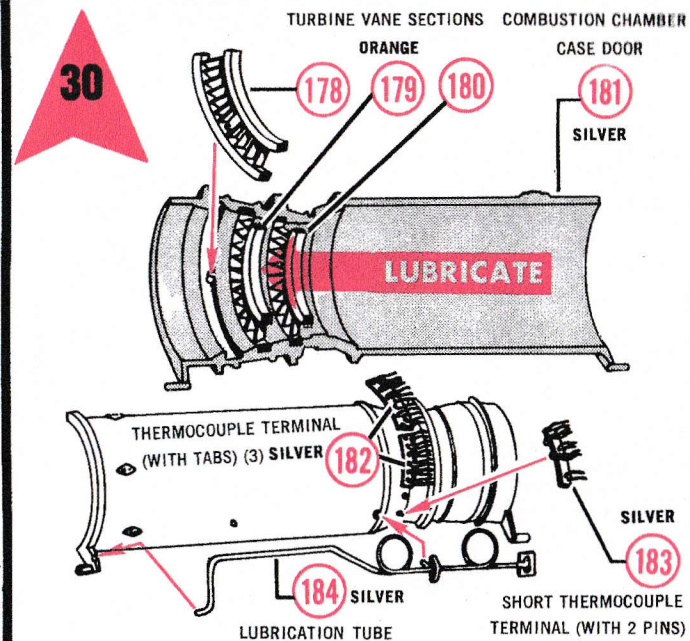
COMBUSTION CHAMBER CASE ASSEMBLIES 28 THRU 32



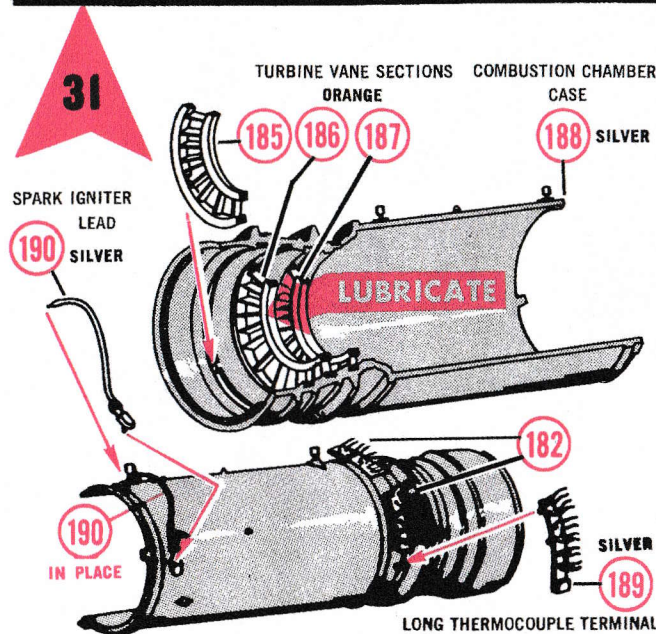
Slide **DO NOT CEMENT** 167 thru 168. Now slide 167 thru 169 and cement 168 to 169. Cement 170 to 169, as shown. Cement 169 to 171. Next cement 171 to 172. Finally cement 173 to shaft and set aside to dry.



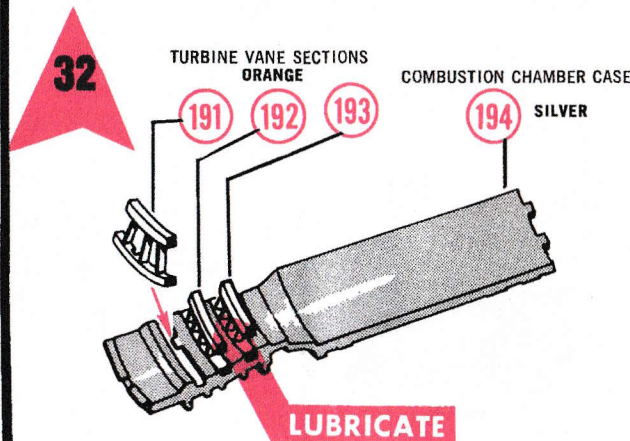
Cement 174 onto square tab on shaft on **assembly 28**. Now cement 175, 176 & 177 together, then onto shaft & 174 then set aside to dry.



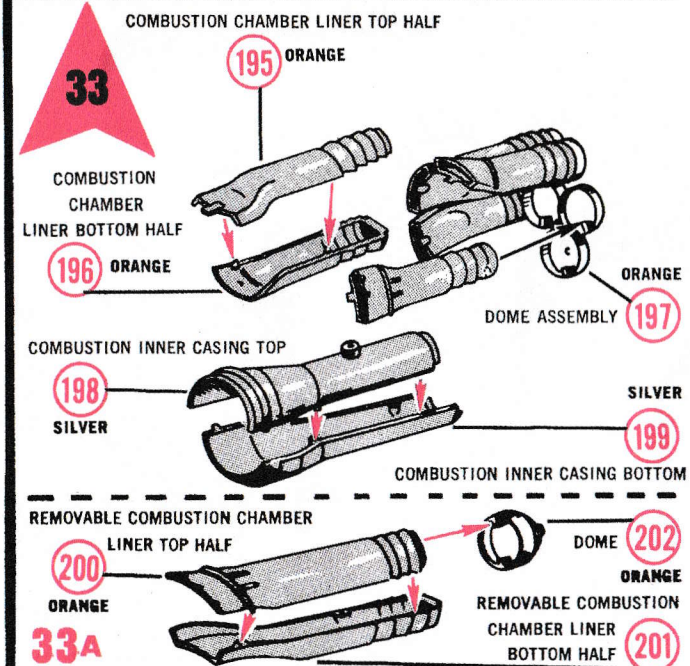
Cement 178 thru 180 into 181. Place **assembly 29** into this assembly and turn for proper clearance and positioning. Remove **assembly 29**. Now turn **assembly 30** around, as shown and cement (2) parts 182 and 183 into place. Finally cement 184 in position and set aside to dry.



Cement 185 thru 187 into 188. As before use **assembly 29** for proper positioning, then remove. Turn **assembly 31** around, as shown and cement remaining 182 and 189 into place. Finally cement 190 into place, as shown in **BLACK** then set aside to dry.



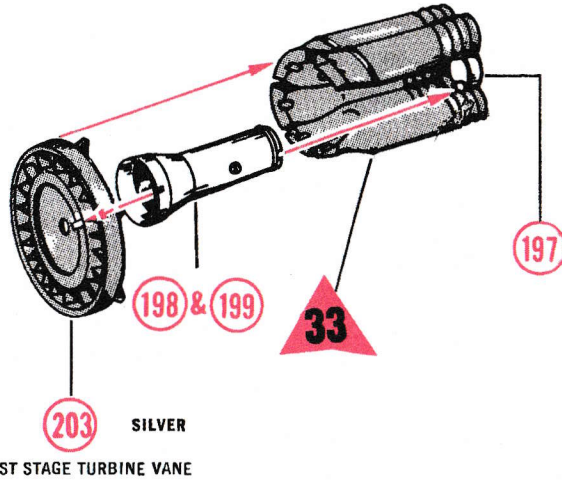
Cement 191 thru 193 into 194. Again use **assembly 29** to position vanes properly then remove assembly. Set this aside until final assembly.



Cement parts 195 to parts 196 until you have (5) sets. Now cement each chamber into 197. Now cement 198 to 199. **SEE DRAWING 33A:** Cement 200 to 201. Now cement 202 to front of 200 and 201.

COMBUSTION CHAMBER ASSEMBLIES

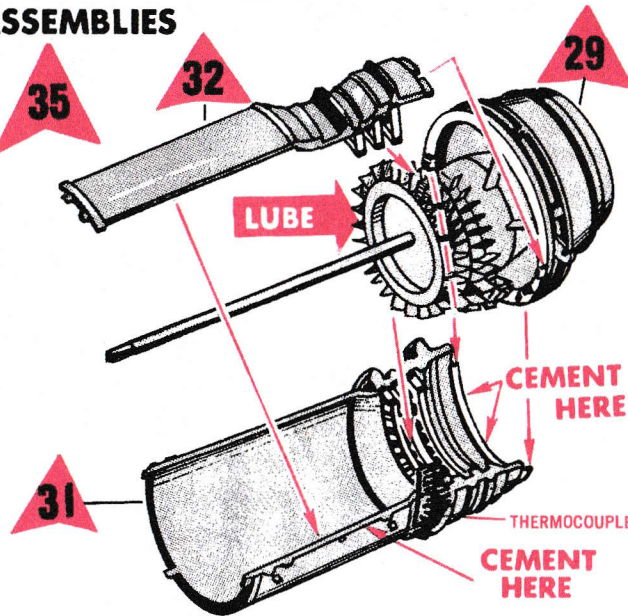
34



FIRST STAGE TURBINE VANE

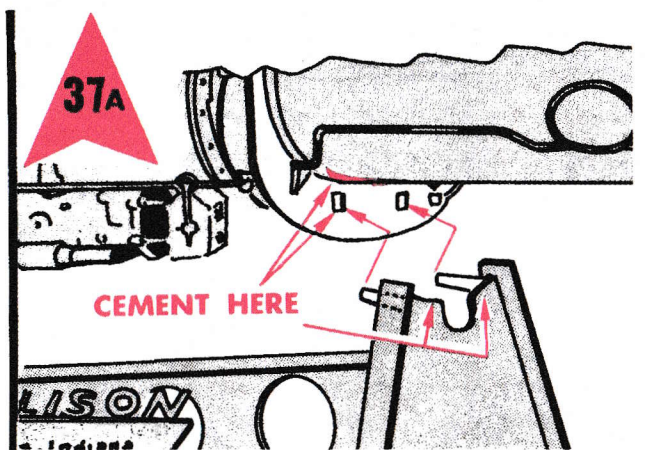
Cement completed 198 and 199 to assembly 33, as shown. Next cement 203 to assembly 33 and 198 and 199. Set aside to dry.

35



Slide wheels on assembly 29 between vanes on assembly 31. Apply cement to the rear where assembly 29 touches assembly 31. Now slide the vanes on assembly 32 between turbine wheel in assembly 29. Now locate slot in assembly 32 into tab on assembly 29, as shown. Be sure this part locates under thermocouple on assembly 31. Apply cement as shown, then set aside to dry.

37A



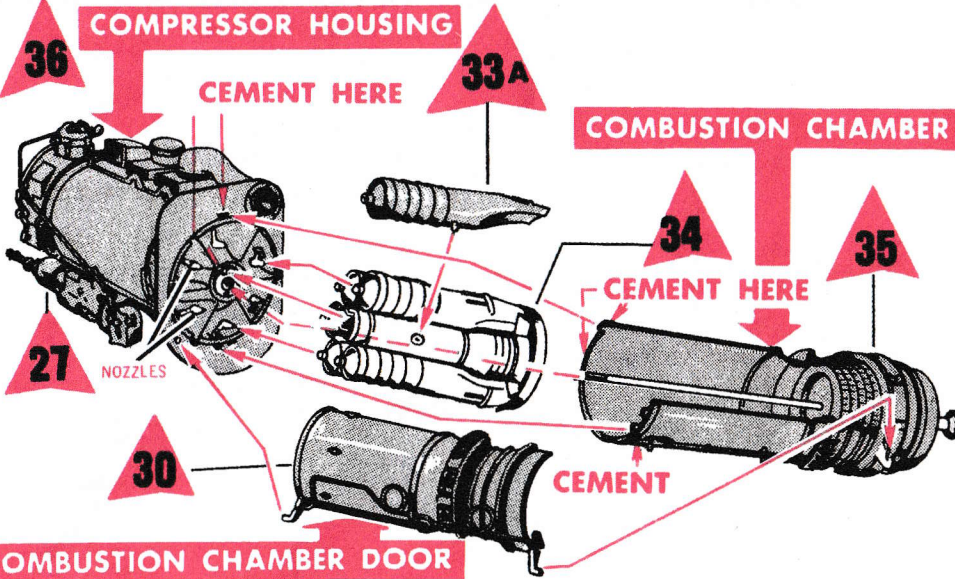
Locate tabs on rear stand leg into holes in compressor diffuser and spray shield, as shown. Apply cement thoroughly to tabs on stand and also to combustion chamber.

TURN ENGINE WITH THIS END CAP KNOB

COMPRESSOR DOOR

COMPRESSOR HOUSING

COMPRESSOR EXTENSION SHAFT

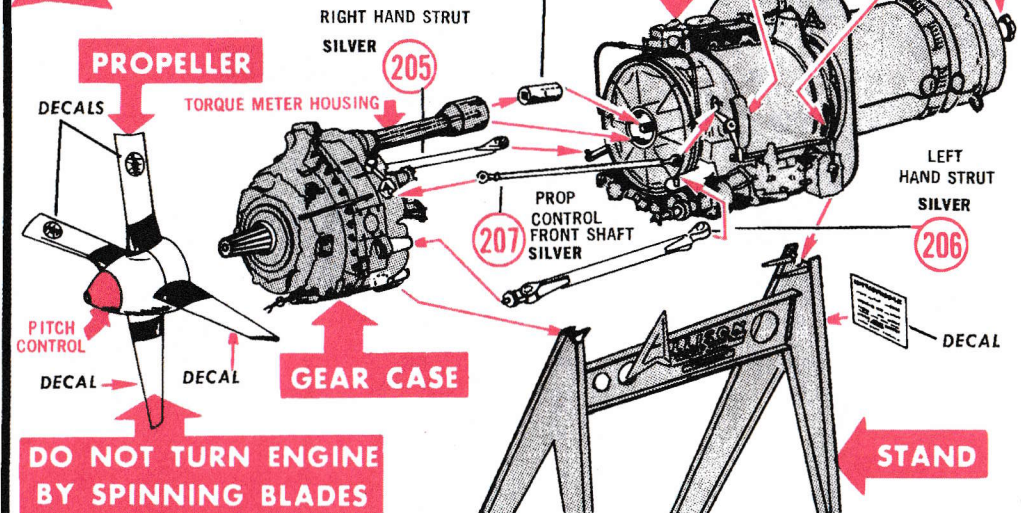


COMBUSTION CHAMBER DOOR

Check all parts to see that they all turn freely. Apply cement to all points shown in drawing and to nozzles. Press assembly 34 into place on compressor housing, locating nozzles into ends of combustion chamber units. Place **DO NOT** cement assembly 33A into place as shown, since this part may be removed if desired. Slide assembly 35 and locate to back of compressor

housing. Turn end cap knob until shaft locates, properly positioning combustion chamber to compressor housing. Now cement chamber to housing. Slide pin on compressor door into hole in compressor housing, then place opposite pin on door into hook on combustion chamber, as shown.

37



DO NOT TURN ENGINE BY SPINNING BLADES

Press, **DO NOT CEMENT** part 204 onto shaft in compressor housing. Next slide torque meter housing into hole in compressor housing, making sure shaft in torque meter housing locates into part 204 all the way. Apply cement to torque meter housing. Now cement 205, 206 and 207 into place as shown. Place engine assembly onto stand. **SEE 37A FOR POSITIONING ENGINE**

TO REAR STAND LEG. Now apply decals to propeller and stand and allow to dry. Finally cement propeller onto reduction gear shaft. **DO NOT** allow cement to contact gear case. You may turn engine with end cap knob. **DO NOT** turn blades by hand. To adjust pitch control, turn spinner nose section, not by turning blades.