

This kit was originally developed by S.S. Limited of Reno, Nevada in the mid-1970's. A total redesign of the kit including many new patterns was done by Paul Redmond of On-Trak Model products in 2006. Wiseman Model Services purchased the line in 2008 and now produces this kit along with new instruction sheets and diagrams.

This kit is a difficult kit to build because of the many different parts and the manner in which they have to fit together to produce an accurate model. We recommend you study the instructions, diagrams and pictures thoroughly before starting construction. You will need a good set of needle files, a full set of small drills (sizes are called out in the instructions), a hobby knife such as an Exacto, gap-filling ACC and much patience. Although difficult to build, this kit will produce a 'jewel' of a model of the Case steam tractor.

We also recommend that you paint as you go. As more parts are installed on the model it becomes more difficult to paint the individual colors in different areas of the model. Colors used are a glossy black for the boiler and rear superstructure, grey for the smokebox and firebox and most other areas, light green for the steam engine and flywheel, red for the wheels and brass for some of the piping components. It is recommended that the resin castings (boiler and firebox) be cleaned with dish washing soap/warm water to remove any mold release residue before painting.

Model construction is broken down into eight main sections: front wheels, rear wheels, rear superstructure, boiler and firebox, boiler/superstructure, steam engine, steps and final assembly.

FRONT WHEEL ASSEMBLY (refer to exploded view-sheet 3 and photo #2)

- 1) Assemble the front wheel halves (parts 58 & 59) together. Notice that there is a 'half hole' along each rim of each wheel half. Align these 'half holes' until they make a complete hole and run ACC along the wheel seams. Drill a .047" diameter hole in each wheel hub for the front axle.
- 2) Make two axle bushings (part 60) .060" long from 3/32" diameter styrene rod. Drill a .047" dia. hole in each for the front axle.
- 3) Check part 62 to make sure the axle holes will clear the .047" dia. front axle. Assemble parts 58, 59, 60, 62 and 63. This can be assembled and ACC'd as a rigid assembly or only glue the axle to the wheels so that they will rotate.
- 4) Install parts 61 onto part 62 to complete the assembly. The chain (part 65) will be installed in the final stages of the tractor assembly.

REAR WHEEL ASSEMBLY (refer to exploded view-sheet 4 and photo #4)

- 1) Fit the wheel halves to their respective mating halves to be sure the interlocking halves fit together freely. Do not glue them together at this time. The hub of the outer wheel half has a cavity for part 83 to fit into and the inner half is flat to fit up against part 87. Note the dimples around the rims of the wheels. These are for mounting the cleats (the styrene parts). **Notice on the photos and drawings how the cleats form a 'V'-pattern on each wheel pointing toward the front of the tractor.**

- 2) Mount parts 87 to each inner wheel half by centering the four protruding bosses on part 87 between any pairs of spokes on the wheel.
- 3) There are four wheel stays (part 85) for each wheel. Glue one stay to part 87 in the hole provided. Carefully form one end of the stay so that it contacts the inside of the rim. One end of the stay should be nearly flush with the seam while the other end should contact the rim one 'stay width' back from that edge. The next stay is installed in the same manner and so on. They are staggered much like when the flaps of a cardboard box are folded to lock them closed.
- 4) Notice the small half hole at the interlocking seam of each wheel half. Place the respective outer and inner wheel halves together so that the half holes line up to form a complete hole. The halves can now be glued together. File the circumference of each wheel smooth prior to mounting the cleats.
- 5) Cut the styrene cleats from their sprues. Study the factory drawing provided and notice on the rear view of the tractor that the cleats are handed (RH and LH). Glue the cleats in place. Some of the mounting dimples in the wheels might have to be deepened with a #72 drill to properly seat the cleats.
- 6) Clear the axle holes in each wheel assembly with a #46 drill.

REAR SUPERSTRUCTURE-WATER AND FUEL BUNKERS (refer to exploded view-sheet 2 and photos 1 & 3)

Before starting construction on this section, file all parts to remove flash and burrs and insure square corners. Some parts may be slightly distorted or bent and should be straightened or flattened. Carefully study the exploded view and the photos to see how the parts are assembled. Not all parts will fit together with a tight fit so a filler may be used to fill in gaps between mating parts. We have found that a thick gap-filling ACC works well and can be sanded and filed smooth after the joint is dry.

- 1) Assemble parts 44, 45, 46 and 56 to form one fuel bunker making sure the assembly is square. Assemble parts 47, 45, 46 and 56 to form the second bunker. Notice that they are mirror images of each other.
- 2) Assemble parts 49, 50 and 51 to form the water tank. Install parts 48 on top of the water tank assembly. Part 48 fits down into the water tank and some filing and fitting may have to be done to get this fit.
- 3) Mount the fuel bunker assemblies (from step 1 above) on top of the parts 48.
- 4) Assemble parts 36, 37 and 38 and mount to the assembly just completed in the above steps. Refer to the photos for a view of what the final assembly should look like.
- 5) Mount parts 42 and 43 to parts 36 and 37 and aligned with the top edges of parts 44 and 47.
- 6) Install parts 57 to the insides of the fuel bunkers (parts 56). These are the support mounts for the overhead canopy.
- 7) Make (2) part 55 from .013" dia. wire and mount to part 51.
- 8) Install parts 54 and 53 to part 51.
- 9) Mount the water hose (part 52) to part 51. Refer to the photos in making a bracket from .015" styrene to mount the hose to part 46.

BOILER AND FIREBOX ASSEMBLY (refer to exploded view-sheet 1 and photos)

The exploded view shows the boiler and firebox as being built up from separate pieces. The kit now features a solid resin casting for the boiler and also for the firebox. In this regard, the boiler is referred to as part 2 and the firebox as part 1 for these instructions and on sheet 1 for the exploded

view. The boiler jacket should be painted gloss black before anything is attached to it. We then used .005" thick styrene to make boiler bands and painted them a brass or gold color. They were ACC'd to the cast-on boiler bands on the boiler. Decal striping might also work for this detail.

1. Notice the round boss on the back of the boiler where it fits into the firebox. Sand/file this boss until there is a tight fit between the two parts and ACC together.
2. Drill the appropriate holes in part 9 as called out on sheet 1 and install onto the boiler. There is a cutout in the front of part 9 where part 15 is attached. This cutout should face to the front of the boiler.
3. Install parts 3 and 5 to the front of the boiler. Part 6 is attached to the cutout in the side of the boiler as shown on sheet 1. Part 7 is installed in the hole on the side of the boiler also as shown on sheet 1.
4. Attach all the remaining parts to the boiler and firebox except the following parts: 27, 28, 29, 30, and 31. These piping parts will be installed later in the assembly sequence. Notice that some parts are not called out on sheet 1. This is because they are now cast integral with the boiler/firebox castings. The steering wheel (part 24) and shaft (part 23-.020" wire) are to be mounted to the steering rod lug shown on part 111 on sheet 5 of the exploded views. This part does not exist so you will have to make it from a small block of styrene with a .020" dia. hole drilled into it. ACC part 111 to the top of the firebox. Then position the steering block just made on the steering shaft and install the steering assembly to the firebox assembly.
5. Note that part 17 is mounted using a piece of .020" wire going into part 9. There is a piping diagram shown on the sheet called 'Scale Structures'. Using the cast pipe fittings provided, some of this piping should be done now before too many other parts are installed on the model. Notice that the blower pipe (part 10) control rod can also be installed at this time.
6. Parts 26 are the lower links. They are longer than the two upper links, so be sure to install the correct ones. They are installed by putting a drop of ACC in the mounting hole in the firebox and inserting the nut-bolt-washer casting (part 25) thru part 26 into the hole. The links need to be able to pivot at this point so they can be lined up with the water/fuel tank assembly later.
7. At this time it is recommended the model be mounted to a wood block with a groove cut in it to clear parts 34 (see photos). A few drops of white glue on the bottom of the firebox will be sufficient to fasten it down. Make sure the boiler is parallel with the wood block. This mounting will make the model easier to handle and will ensure the rear superstructure is aligned correctly with the firebox.

BOILER/SUPERSTRUCTURE ASSEMBLY (refer to exploded views—sheets 1, 2, 4 and photos)

- 1) Drill a .082" hole thru part 72 for the rear axle. It is suggested to drill from both ends and meet in the middle or just drill part-way in from each end and use stub shafts for the rear axle instead of using a full length part 73 (.082" brass wire). The ends of part 72 may have to be filed to shorten the part if it is too long to fit between the side walls of the superstructure (parts 36 & 37). Glue part 72 in place. Part 71 need only be drilled slightly from each end as there is no thru shaft. Shorten the part if necessary, and glue in place.
- 2) Determine correct length for rear axle and cut to length. Slide into place followed by the lower links (parts 26). Slide parts 82 & 89 on axle. Note the part 82 is longer and goes on the drive side of the tractor. Glue these in place along with lower links and rear axle.
- 3) The upper links (parts 39 & 40 on sheets 1 & 4) can be installed now. Gears (parts 80 & 81) hold the link on the drive side of the tractor and parts 25 and 88 hold the link on the other side. Note that the drive side link has a boss on one end which must face toward the tractor.

STEAM ENGINE ASSEMBLY (refer to exploded views—sheets 2, 4, 5 and photos)

- 1) Assemble the steam engine as shown on sheet 5. This would include parts 91, 92, 94, 98, 99, 104 and 116. Mount this engine assembly on the tractor and to bracket (part 6). Mount part 74 on the drive side of the tractor so that a shaft (part 75-.047" brass wire) will go thru parts 74 and 92. Slide parts 114 and 115 on this shaft and glue shaft in place.
- 2) Install parts 95, 96 and 97 on one end of previously installed shaft (part 75). Some filing will be necessary to get part 95 to fit into the cylinder unit (part 91).
- 3) Cut, file and fit part 103 to fit into the cylinder unit and into part 114. Notice that a protrusion on top of part 114 must also fit into a .035" hole in part 104.
- 4) Assemble parts 101 and 102 to part 100 and mount this assembly to the top of the steam dome (part 9). It will be necessary to do some filing and bending to get part 100 to fit with part 99.
- 5) Assemble parts 108, 109, 112 and 113 to part 111. Cut a piece of .020" wire (or smaller) to fit between parts 112 and 101. Note also that the cast shaft on part 113 fits into part 104.
- 6) Install part 110 between part 108 and mounting hole in part 38.
- 7) Mount part 106 to part 74 and to part 108.
- 8) Install parts 76, 77, 78 and 79 to the drive side of the tractor.
- 9) Fit pipe (part 93) between parts 4 and 91.

STEPS (refer to exploded view-sheet 3 and photos)

- 1) Assemble steps per sheet 3.
- 2) Install steps to boiler. The wood block will support the steps at the correct height while gluing in place. **NOTE: Try not to disturb the steps during the remainder of assembly as they will bend easily and possibly break off.**

FINAL ASSEMBLY (refer to explode views and photos)

- 1) Using the cast pipe fittings provided in the kit, assemble parts 27, 28, 29, 30, 31, 32 and 33 (see sheet 1). Refer to sheet 1 and the piping diagram on the Scale Structures sheet for aid in where each pipe goes.
- 2) Using a razor blade and small screw driver, **carefully** pry the complete assembly from the block of wood. Do this such that no pressure is put on the steps!
- 3) Mount the rear wheels to the rear axle and fasten in place using part 90 on the drive side and part 83 on the other side. **NOTE: THE LARGE WHEEL GEARS MAY NOT MESH WITH THE SMALLER DRIVE GEARS IN WHICH CASE FLATS MAY HAVE TO BE FILED ON THE GEARS TO GET THE WHEELS ON.**
- 4) Mount the front wheel assembly to the tractor making sure the boiler remains parallel to the ground. Part 63 will have to be trimmed in height to accomplish this. **NOTE:** cut the provided chain in half and glue each half to part 62 before mounting wheel assembly to boiler (as shown on sheet 3).
- 5) Attach ends of chain to steering scroll (part 21). One chain must pull from the top of the scroll while the other winds on from the bottom.
- 6) A drive belt runs from the cast on pulley on part 114 to the cast on pulley on part 99 (the governor). Use a strip of thin paper cut about 3/64" wide to represent this drive belt (see photo 8).

Congratulations! This completes the assembly of the Case Steam Tractor. Should the canopy be desired, instructions for building it are illustrated on the Scale Structures sheet and the wood and cast metal parts are provide in the kit. The .020" brass wire is used for the canopy supports.



PHOTO 1



PHOTO 2

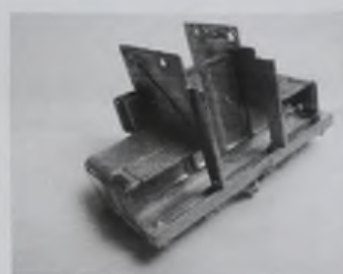


PHOTO 3



PHOTO 4



PHOTO 5

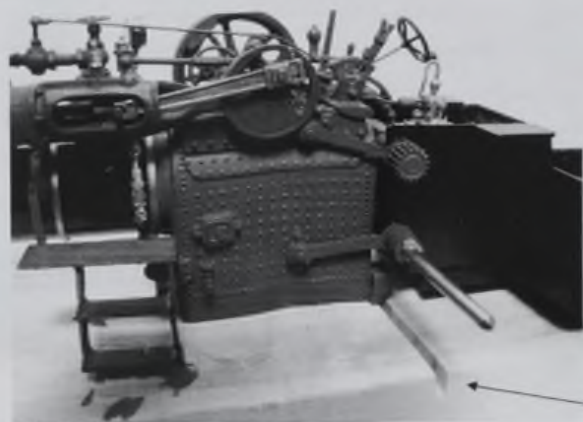


PHOTO 6

WOOD BLOCK
WITH GROOVE

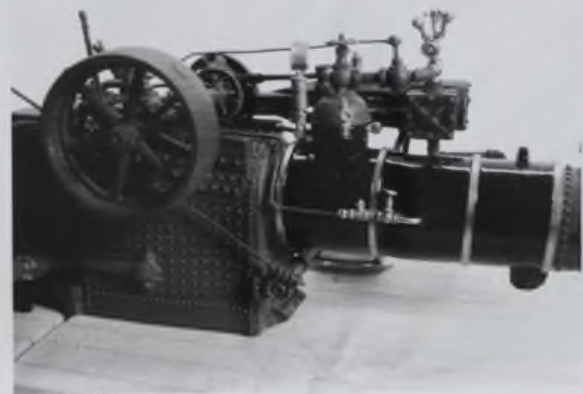


PHOTO 7

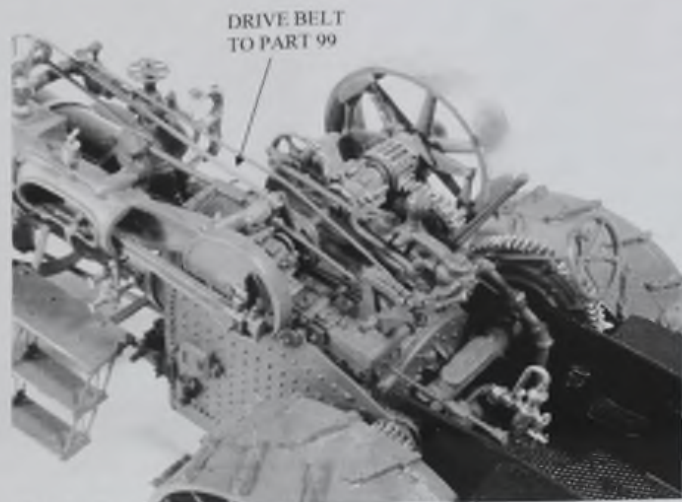


PHOTO 8



PHOTO 9

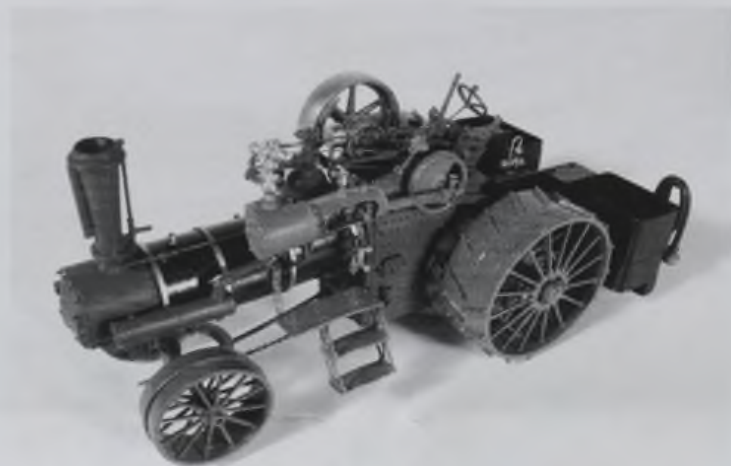
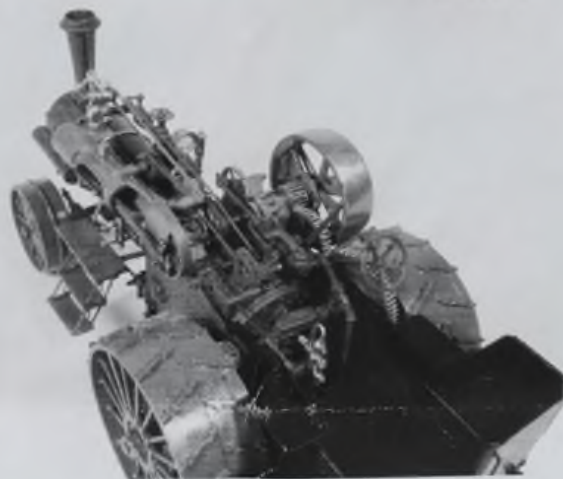
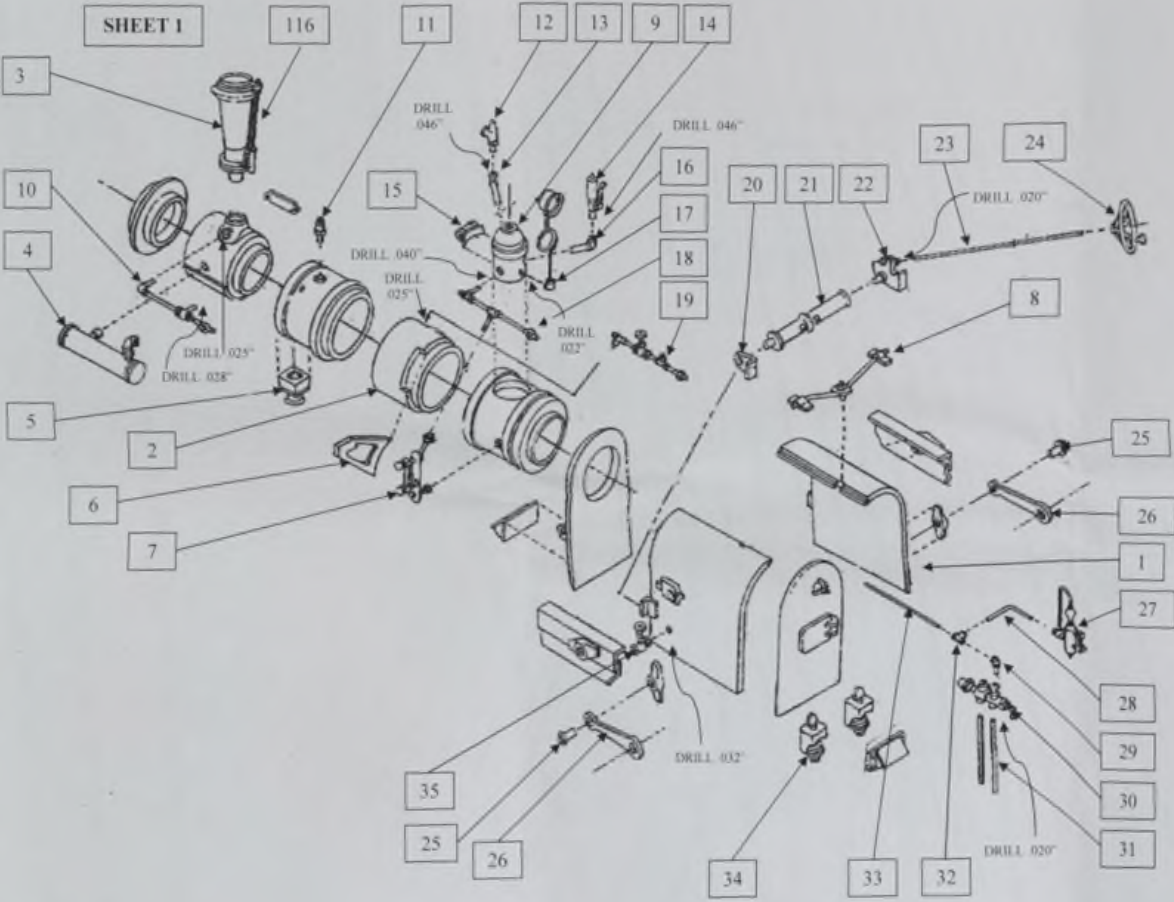


PHOTO 10

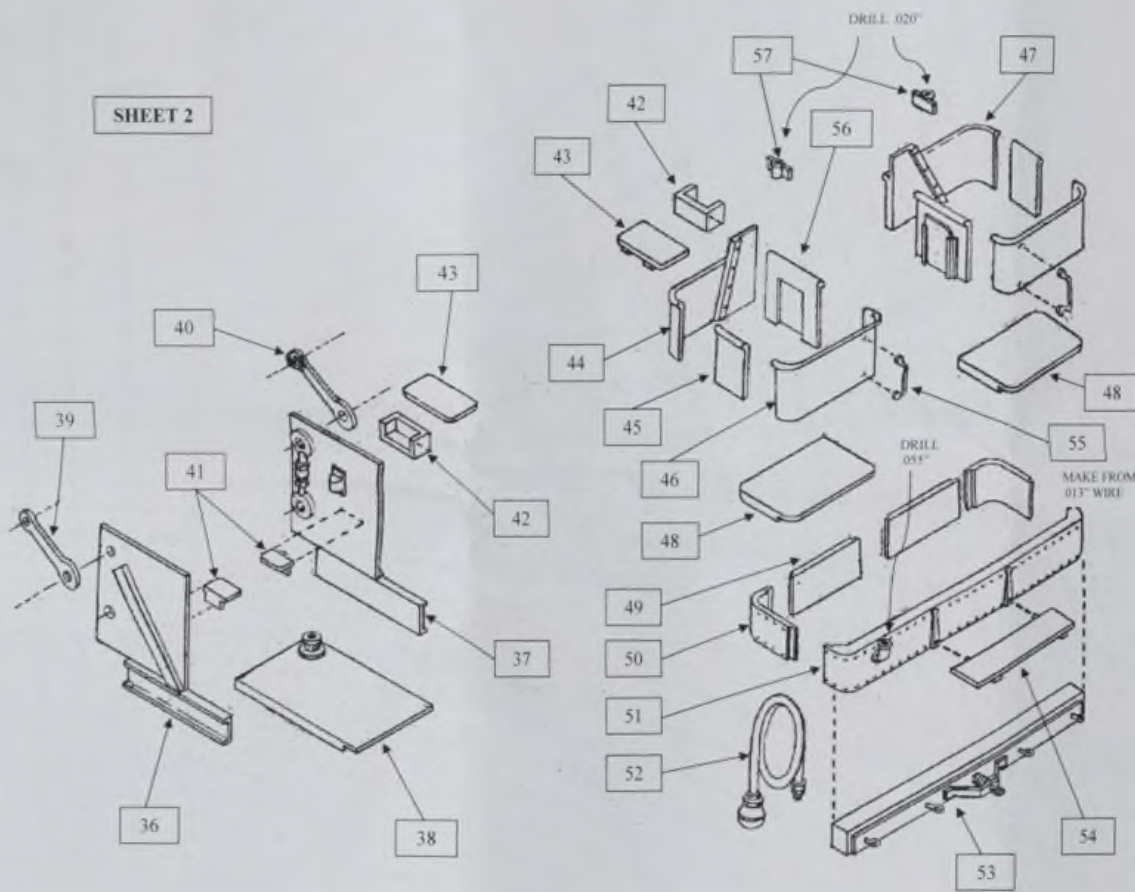
PHOTO 11



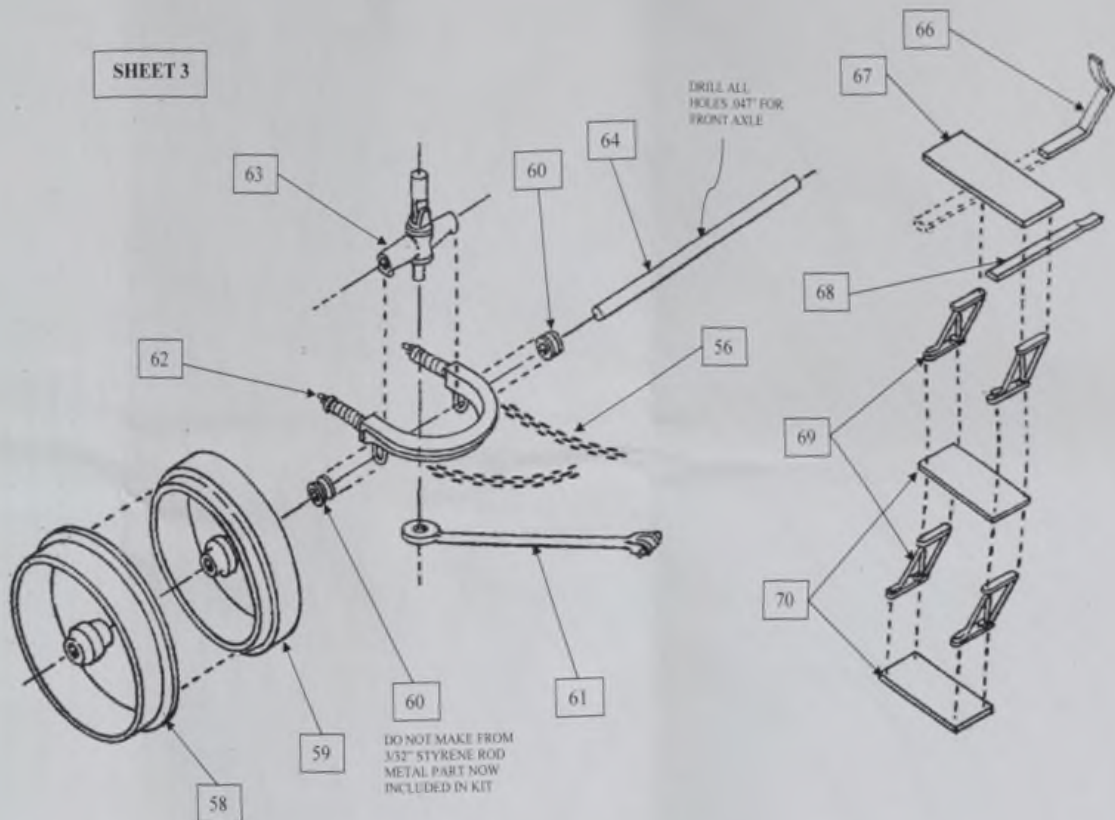
SHEET 1



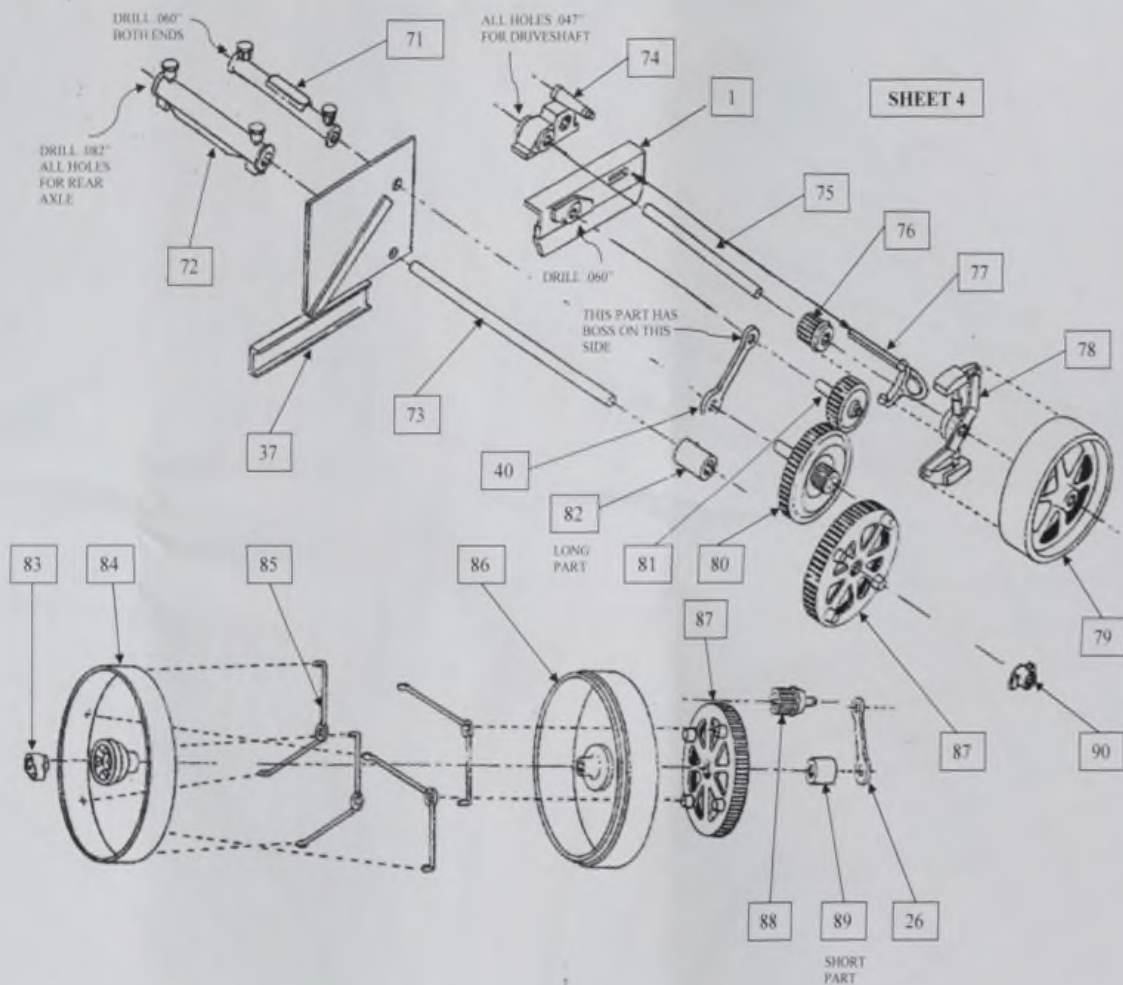
SHEET 2



SHEET 3



SHEET 4



SHEET 5

