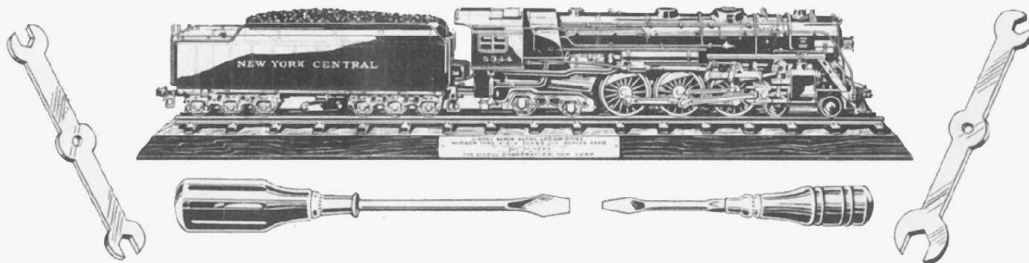


INSTRUCTIONS

for Assembling



LIONEL No. 700 KW.

HUDSON-TYPE 4-6-4 SCALE MODEL
LOCOMOTIVE



THE LIONEL CORPORATION

15 EAST 26th STREET, NEW YORK, N. Y.

FACTORY AND SERVICE DEPARTMENT — SAGER PLACE, IRVINGTON, N. J.

Service Station
58 EAST WASHINGTON STREET
CHICAGO, ILLINOIS

Service Station
718 MISSION STREET
SAN FRANCISCO, CALIFORNIA

INSTRUCTIONS FOR ORDERING PARTS

OUR replacement parts are manufactured early in the year. As it is difficult to anticipate the demand for these parts, there is a possibility of our supply becoming exhausted at a time when they are needed most. Therefore, we urge our dealers and our individual customers to order repair parts early in the year. This will enable us to send the orders completely filled; at the same time our friends will have avoided the inevitable delay in filling orders which is attributable to the volume of work which we are obliged to handle during the pre-holiday and the post-holiday season.

Individual customers and dealers who have no account with us must include the remittance with each order. C.O.D. ship-

ments are not only costly to the consignee, but they involve considerably more time in the preparations for mailing.

A Service Charge of 15c is applicable to all orders amounting to less than 50c.

It is very important that the part numbers be specified when ordering parts. If there is any doubt regarding the number, it is well to send us a sample or a fairly accurate reproduction. When sending a sample part, be sure to pack it carefully so as to guard against the possibility of its being lost or damaged in the mails. We return all sample parts with the order.

Prompt service can best be realized by sending the order to your nearest Service Station.

INSTRUCTIONS

for Building

THE LIONEL HUDSON 5344 JI-E

HERETOFORE the building of model locomotives was undertaken by only the few who could afford to pay for expensive parts or to purchase tools with which to make the parts themselves. Today young and old alike can enjoy the thrill of scale model railroading—building their own engine and tender, an accurately scaled model of the New York Central's powerful Hudson.

Any home work shop will contain the few common tools necessary. The special ones are included with the kits.

In assembling the model it will not be necessary to do any machine work, laying out, fitting of parts or soldering as these operations have been completed at the factory. However, mistakes may occur unless care is exercised particularly when assembling small parts and screws, as there are several parts that might be fitted upside down or interchanged. Note carefully the

slight differences in sizes and shapes as they are all clearly shown in the illustrations.

Don't guess—refer to the illustrations and avoid unnecessary mistakes.

When tightening screws and nuts use moderate force. Owing to the accuracy of the model these parts must necessarily be made small and the threads are therefore easily stripped. Do not use pliers on nuts and bolts as they will mar the surface. Special wrenches are furnished for this purpose.

Bear in mind that the engineer's side is the right hand side and that when the assembly is the same on both sides the right side view will be shown unless otherwise stated. It is urgently recommended that you follow the procedure set forth in these instructions, and in the exact order described. By failing to proceed as directed, you will not have a perfect model and you will have missed the thrill of knowing that you have an accurate, authentic scale model.

PARTS FOR 700EW LOCOMOTIVE AND TENDER

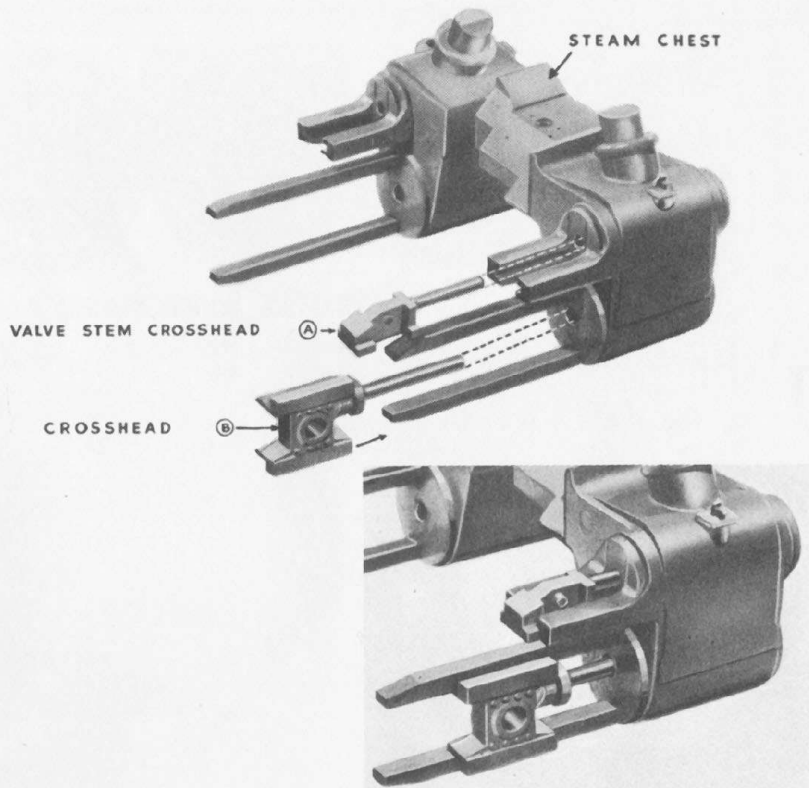
Part Number	Description	Packed in Kit Number	Price	Part Number	Description	Packed in Kit Number	Price
2-111	#6 Lock Washer	4	\$.01	700E-177	Feedwater Delivery Pipe	3	\$.20
238E-12	Spacer	5	.05	700E-184	Ball Thrust Washer	2	.05
250E-54 BN	Washer	4	.05	700E-187	Collector Lock Washer	2-5	.02
250E-55 BN	Washer	4	.05	700E-188	#6 Lock Washer	2	.02
418T-30	Spring	4	.02	700E-189	Retaining Ring	2	.05
700E-5	Trailer Truck Frame	4	.50	700E-194	Reach Rod Screw	4	.05
700E-11	Pilot	4	.75	700E-195	Ash Pan Pin	3	.05
700E-16	Ladder	4	.10	700E-210	Trailer Truck Front Wheel & Axle	4	.30
700E-24	Worm Shaft Bearing	2	.25	700E-211	Trailer Truck Rear Wheel & Axle	4	.40
700E-25	Crosshead Guide Support R.H.	1	.25	700E-212	Side Rod Assembly R.H.	1	.50
700E-26	Ball Thrust Bearing	2	.25	700E-213	Side Rod Assembly L.H.	1	.50
700E-28	Worm Housing Gasket	2	.05	700E-216	Partial Valve Gear Assem. R.H.	1	.75
700E-31	Worm Housing Cover	2	.10	700E-217	Partial Valve Gear Assem. L.H.	1	.75
700E-33	Pilot Truck Spring	4	.05	700E-218	Combination Lever Assem.	1	.25
700E-34	Trailer Truck Spring	4	.05	700E-219	Lubricator Lever	4	.20
700E-36	Trailer Truck Pivot Screw	4	.10	700E-227	Coupler Lift Bar	4	.30
700E-38	Pilot Truck Pivot Screw	4	.10	700E-231	Lockbar & Chain Assembly	4	.30
700E-39C	Side Rod Assem. Screw, Rear	1	.10	700E-233	Bell Complete	3	.35
700E-42	Drive Rod R.H.	1	.25	700E-239	Crosshead Assembly	1	.25
700E-43	Drive Rod L.H.	1	.25	700E-242	Feedwater Pump Bracket	4	.25
700E-44C	Eccentric Crank Screw	1	.10	700E-243	Valve Gear Support Assem.	1	1.00
700E-45C	Side Rod Assem. Screw, Front	1	.10	700E-249	Pilot Truck Complete	4	1.00
700E-49	1/16x3/8" Type Two Groove Pin	1	.02	700E-251	Steam Chest	1	1.00
700E-52C	Side Rod Collar (Washer)	1	.10	700E-252	Booster Steam Pipe Assem. R.H.	3	.50
700E-59C	Crosshead Screw	1	.05	700E-253	Booster Exhaust Pipe Assem. L.H.	3	.50
700E-62	Crosshead Guide Support L.H.	1	.25	700E-254	Injector Suction Pipe & Union	3	.20
700E-65C	Combination Lever & Radius Rod Screw	1	.05	700E-255	Injector Overflow Pipe & Union	3	.20
700E-66	Valve Stem Crosshead	1	.10	700E-258	Outside Collector Assem.	2-5	.75
700E-69	Flagpole	4	.05	700E-291	Separator Bottom R.H.	3	.25
700E-70	Stanchion	3-4-5	.05	700E-309	Coupler Complete	4	.50
700E-81	Separator Bottom L.H.	3	.25	700E-311	Worm	2	.50
700E-82	Power Reverse Cylinder	3	.25	700E-312	Worm Shaft Flange	2	.15
700E-83	Turbo-Generator	3	.10	700E-313	Armature Shaft Flange	2	.15
700E-84	Booster Steam Coupling	3	.10	700E-314	Flexible Coupling Disc	2	.10
700E-85C	Whistle	3	.15	752-9	18 Volt Lamp	4	.30
700E-90	Injector Delivery Pipe	3	.15	700K-16	Smokebox Front & Rhinestones	4	2.50
700E-95	"U" Bolt	3	.05	700K-22	Nameplate	4	.15
700E-97	Feedwater Heater Delivery Pipe	3	.20	700K-25	Transfers (Locomotive)	4	.10
700E-98	Feedwater Pump to Heater Pipe	3	.15	700K-15	Transfers (Tender)	5	.10
700E-102	Feedwater Pump	4	.15	700K1-8	Frame, Wheel & Worm Wheel Assembly	1	7.50
700E-103	Feedwater Pipe	4	.20	700K2-8	Motor, "E" Unit, Head Lamp Bracket, Terminals, Wire and Sleeving	2	8.00
700E-104	Feedwater Screw	4	.05	700K3-4	Cab & Boiler Assem. Trim	3	9.00
700E-107	Pipe Clamp	3	.05	700T-3	Truck Frame	5	.75
700E-111	Insulator Insert	2-5	.10	700T-4	Bearing Cap	4	.05
700E-112	Collector Insulator	2-5	.10	700T-5	Coal Pile	5	.50
700E-113	Collector Bracket	2	.10	700T-6	Rear Steps	5	.10
700E-114	Collector Arm	2	.10	700T-7	Ladder Rail	5	.10
700E-115	Collector Pivot	2	.10	700T-8	Corner Rail	5	.10
700E-116	Collector Spring	2	.05	700T-9	Grab Handle	5	.10
700E-118	Bell Frame	3	.10	700T-12	Handrail R.H.	5	.15
700E-121	Power Reverse Rod	3	.15	700T-13	Handrail L.H.	5	.15
700E-122	Reach Rod	4	.15	700T-14	Front Steps	5	.15
700E-124	Smoke Box Front Handrail	4	.15	700T-22	Drawbar	5	.10
700E-131	Drawbar Pin	4	.10	700T-23	Brake Cylinder	5	.10
700E-145	Coupler Retaining Nut	4	.05	700T-25	Bearing Cap Screw	4	.05
700E-146	Valve Link Fulcrum Screw	1	.05	700T-26	Pivot Screw	5	.10
700E-147	Lead Weight	2	.75	700T-33	Wheel & Axle Assembly	5	.50
700E-152	Drawbar Chain	4	.10	700T-34	Coupler Complete	5	.40
700E-157	Right Handrail	3	.25	SM318-2	Shoe Roller	2	.10
700E-158	Left Handrail	3	.25	T-110	Washer	4	.02
700E-159	Coupler Retaining Bolt	4	.05				
700E-167	Ash Pan	4	.35				
700E-173	Coupler Pin	4	.05				
700E-174	Lubricating Washer (Felt)	2	.02				
700E-175	Drawbar Chain Ring	4	.05				
700E-176	Stanchion Nut	3-4-5	.05				

KIT No. 1 (700K-1)

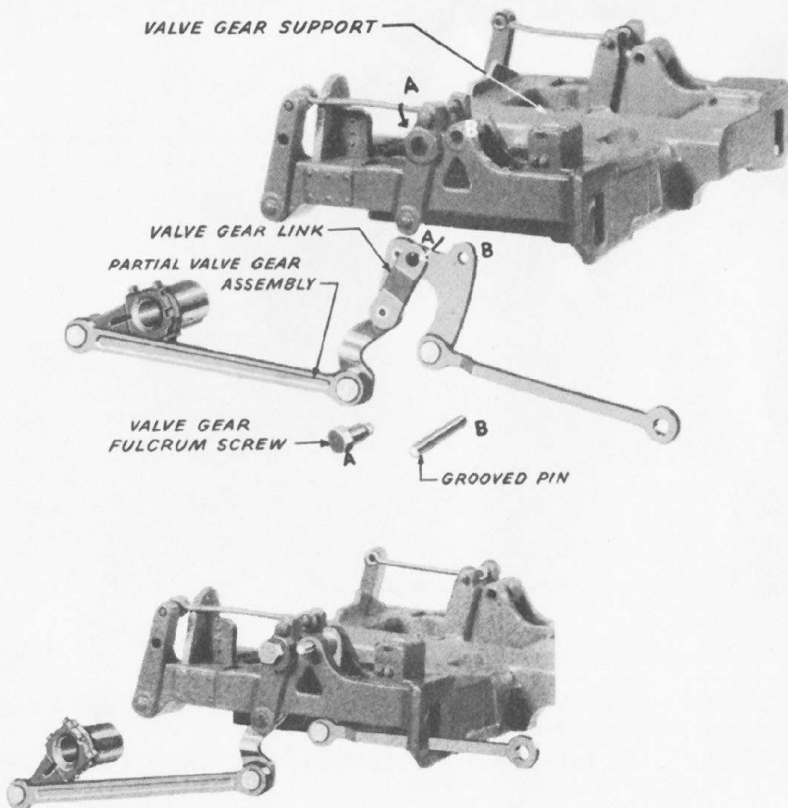
Assembly 1—

Valve Stem Crossheads

Try the valve stem crossheads -A- and the crossheads -B- in their respective positions. If they do not slide freely in the guides it may be necessary to relieve the grooves in the crosshead casting with a narrow file, or to straighten the crosshead guides.

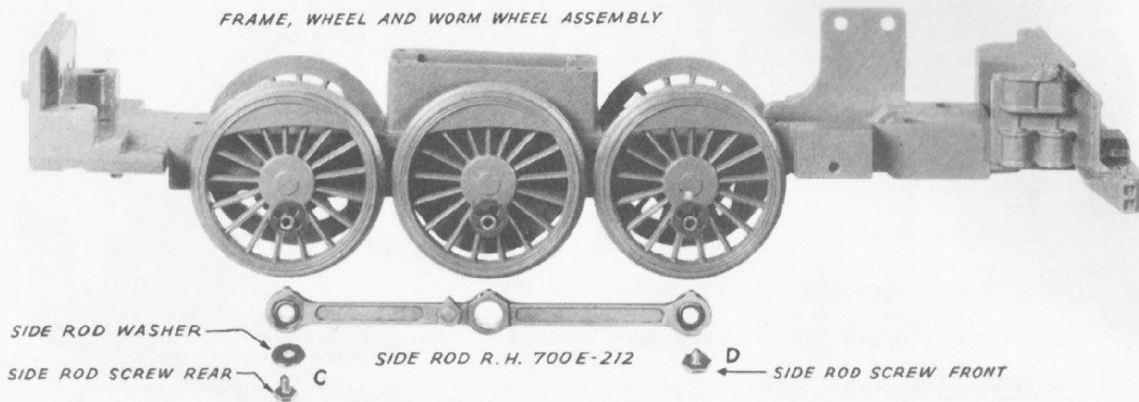


Assembly 2—Valve Gear

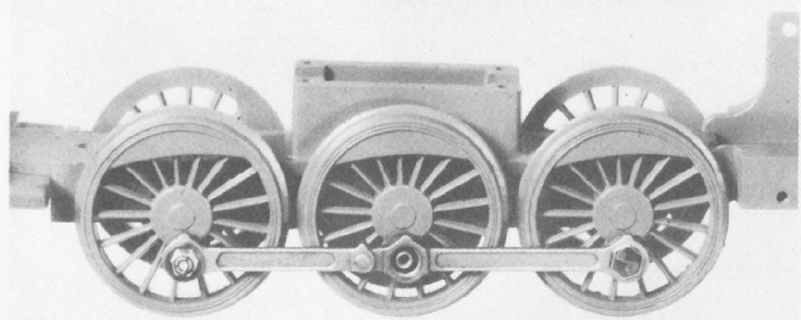


Place the partial valve gear assembly in the valve gear support and insert the grooved pin -B-. Insert the valve link fulcrum screw -A- through the valve gear support into the valve gear link and tighten.

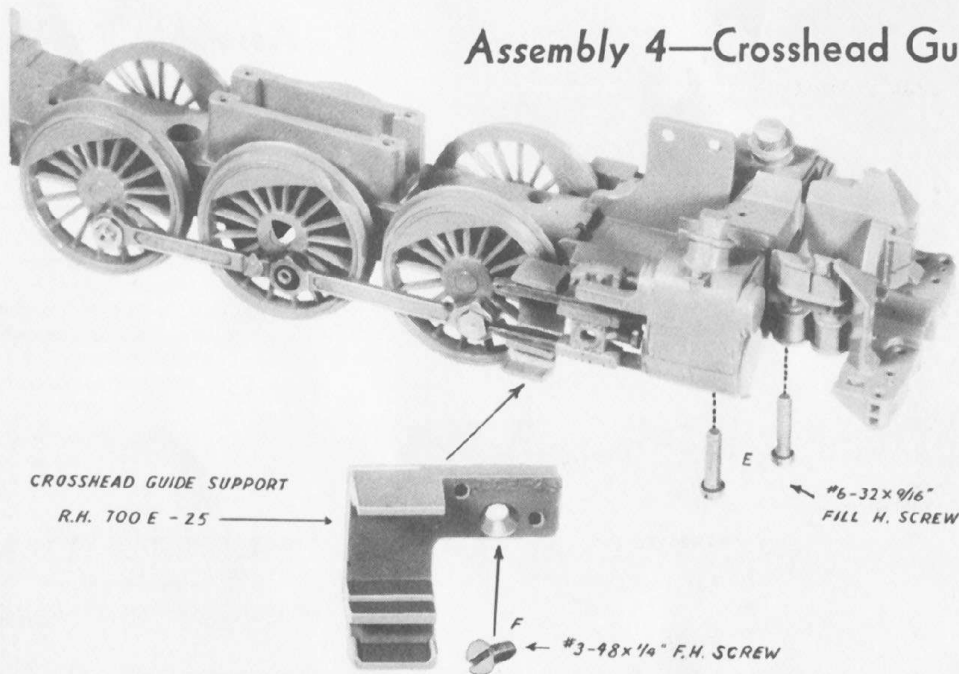
Assembly 3—Side Rod



Line up the drive wheels and drop the side rod 700E-212 into place. Insert the large head screw -D- in the front drive wheel and the washer and screw -C- in the rear wheel. Tighten.



Assembly 4—Crosshead Guide Support

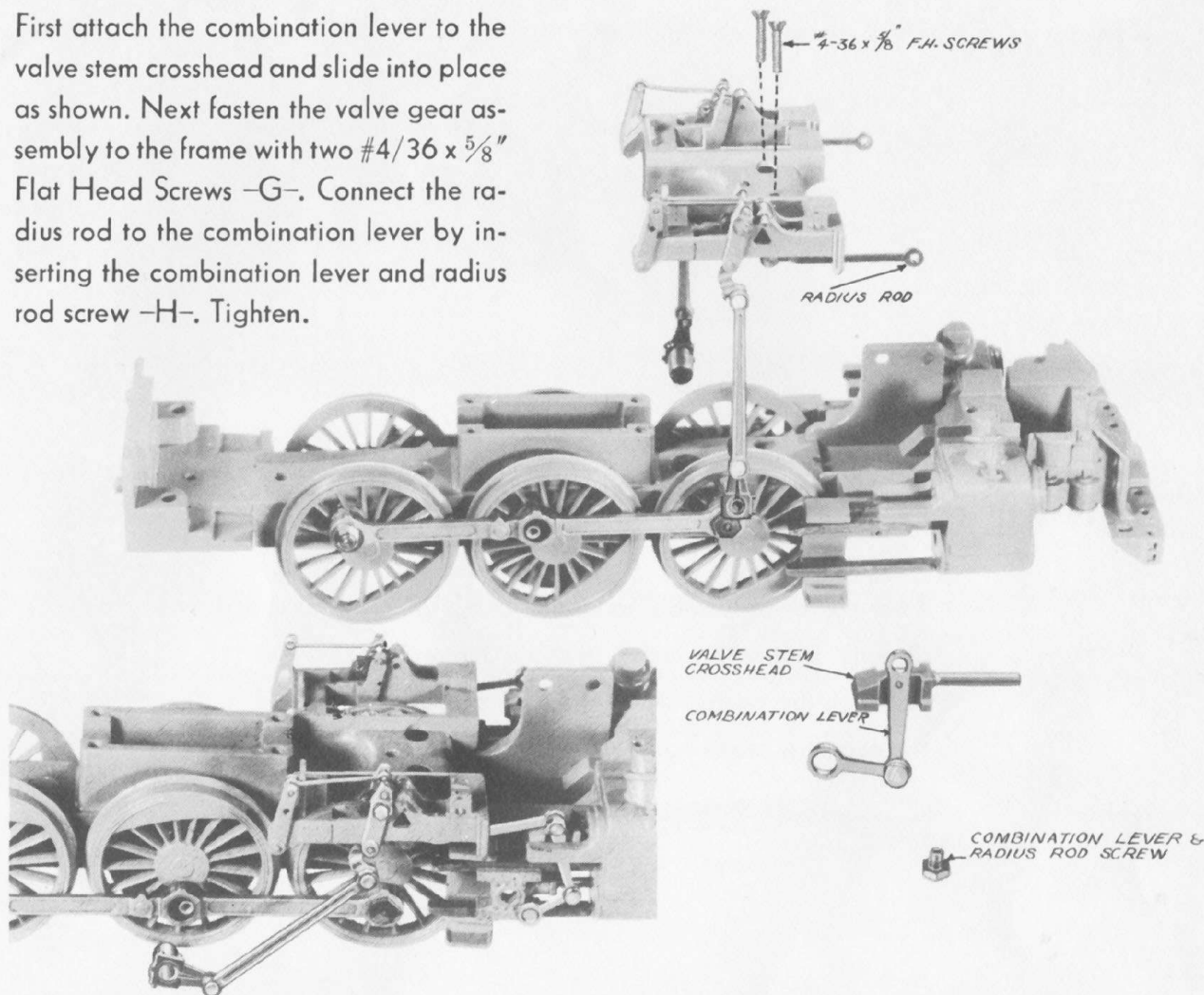


Place the steam cylinders on the frame as shown, and insert the two #6/32 x 9/16" Fillister head screws -E- from the under side of the frame and tighten.

Slide crosshead guide support 700E-25 into position behind the crosshead guides and fasten to frame with #3/48 x 1/4" flat head screw -F-.

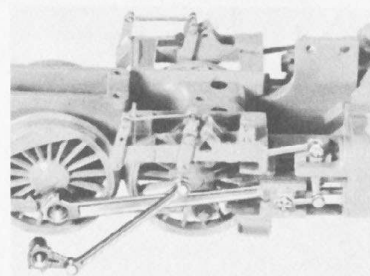
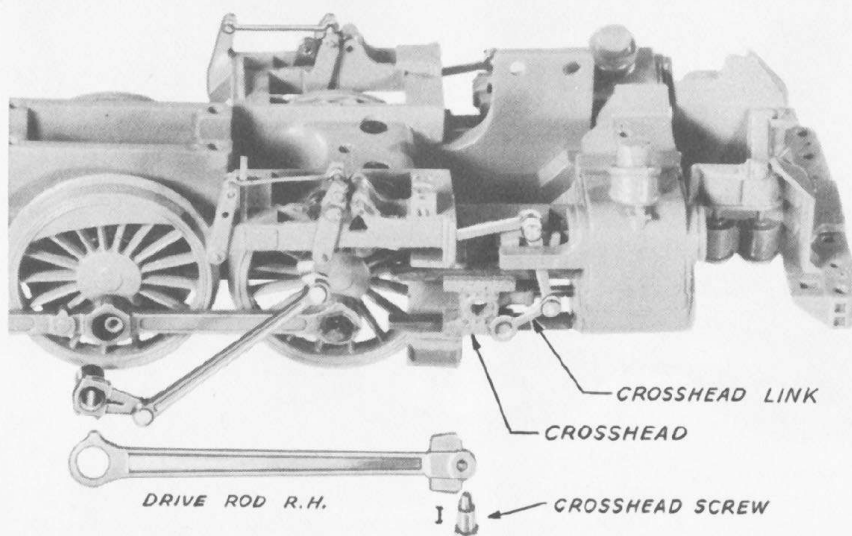
Assembly 5—Combination Lever and Valve Gear

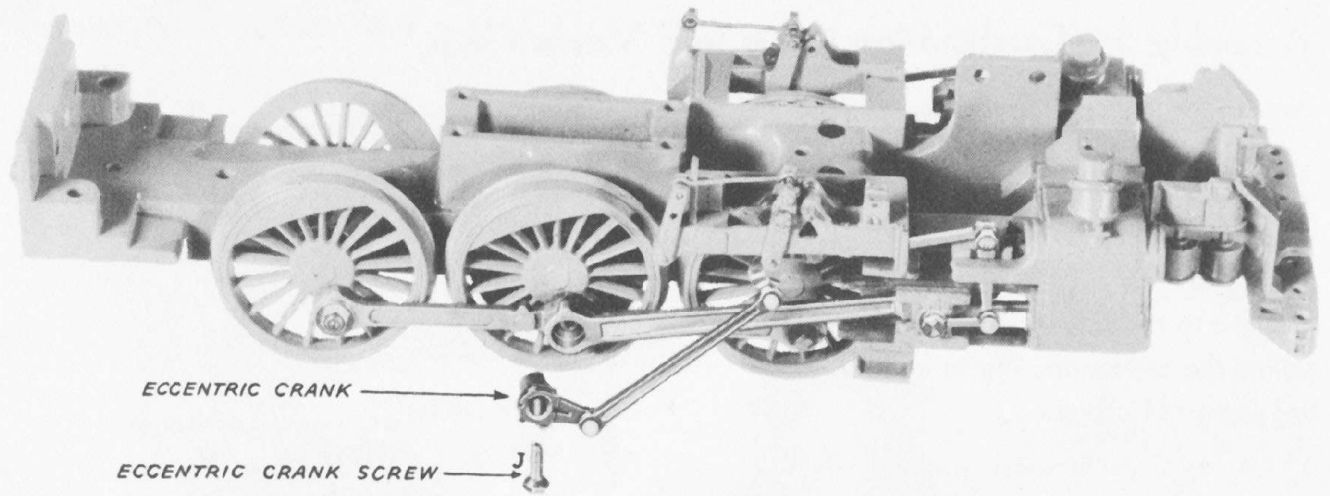
First attach the combination lever to the valve stem crosshead and slide into place as shown. Next fasten the valve gear assembly to the frame with two #4/36 x 5/8" Flat Head Screws -G-. Connect the radius rod to the combination lever by inserting the combination lever and radius rod screw -H-. Tighten.



Assembly 6—Drive Rod and Crosshead

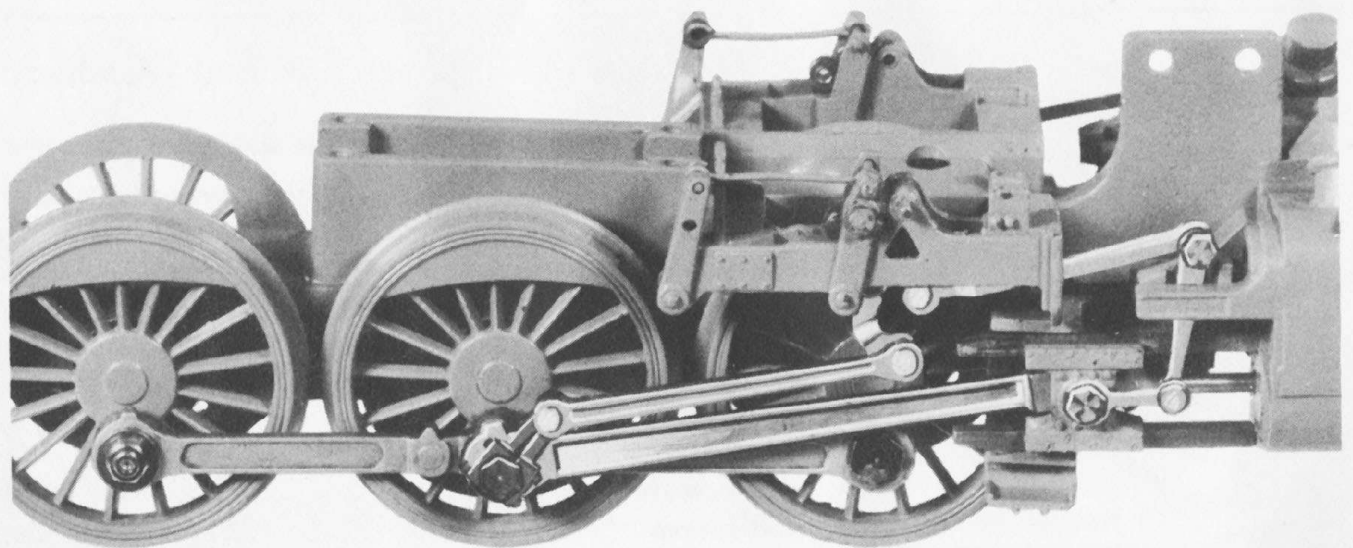
Fit the drive rod in place and slide the crosshead into position. Insert the crosshead screw -I- through the crosshead link as shown and tighten.





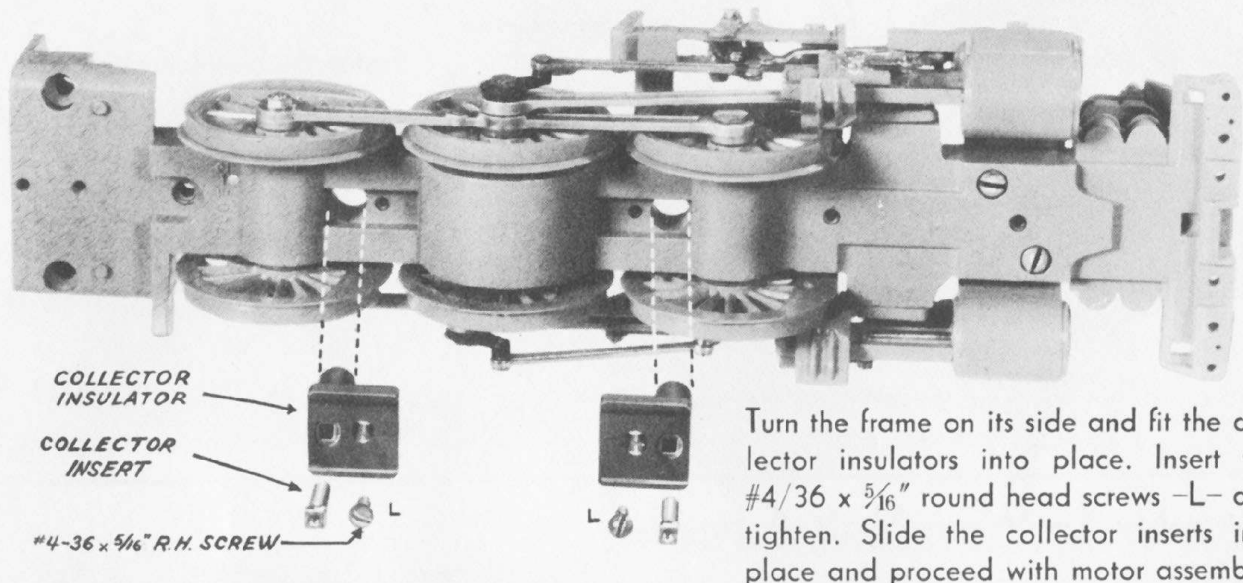
Assembly 7—Eccentric Crank

Turn the drive wheels until the crank pins are directly below the axles, then fit the eccentric crank to the center drive wheel as shown. Insert the eccentric crank screw -J- and tighten.



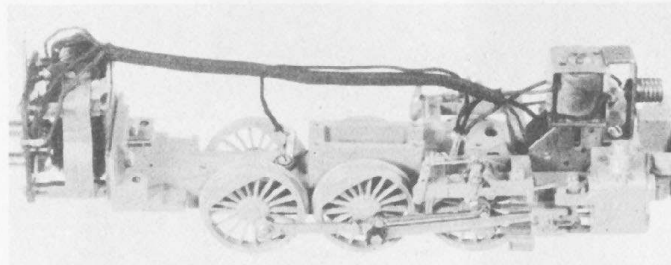
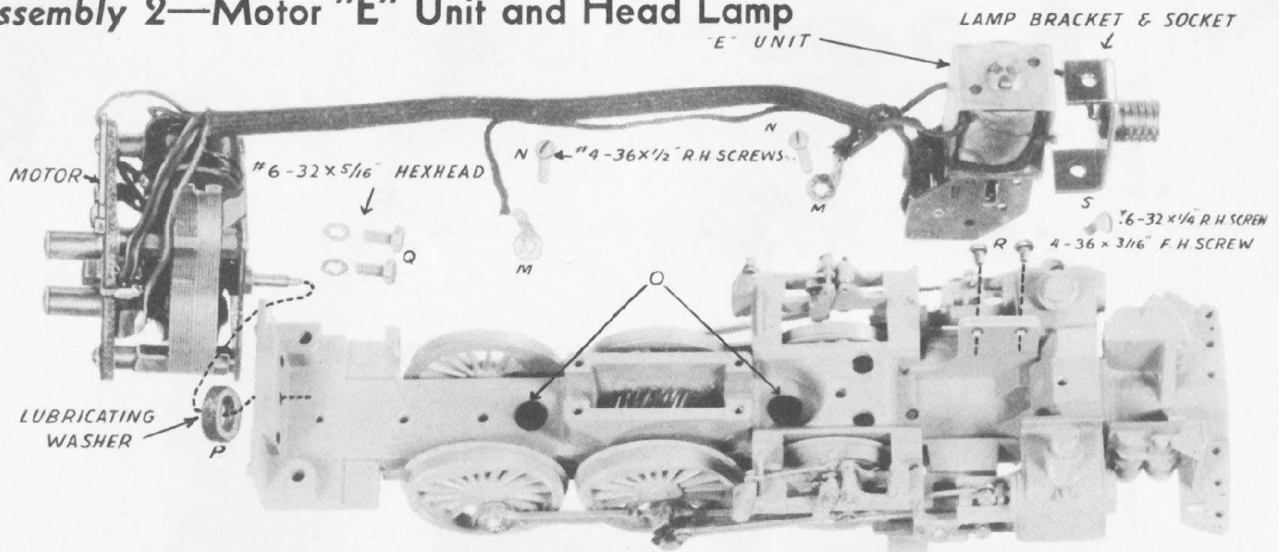
KIT No. 2 (700K-2)

Assembly 1—Collector Insulators and Inserts



Turn the frame on its side and fit the collector insulators into place. Insert the #4/36 x 5/16" round head screws -L- and tighten. Slide the collector inserts into place and proceed with motor assembly.

Assembly 2—Motor "E" Unit and Head Lamp



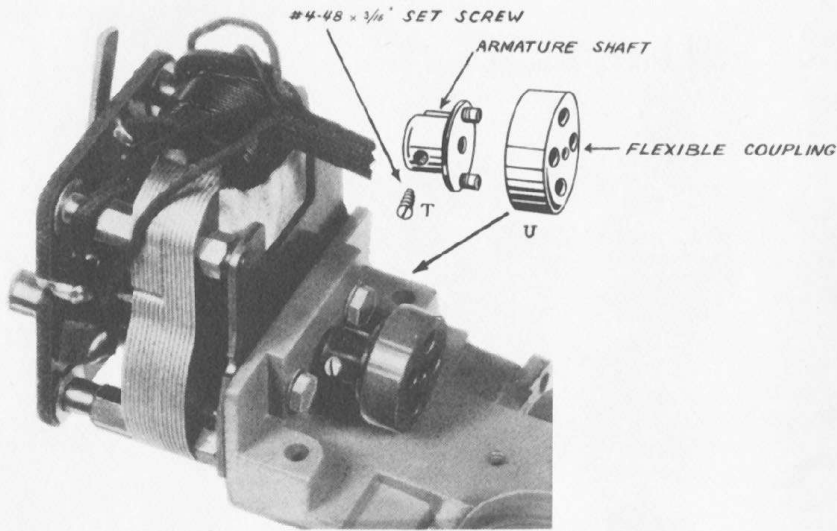
Place the motor "E" unit and head lamp bracket alongside the frame and fasten the collector terminals -M- to the collector inserts at -O- with a #4/36 x 1/2" round head screw -N-. Bend terminals at right angle to eliminate danger of short circuits.

Next fit the felt lubricating washer -P- into the recess in the rear of the frame, then insert the armature shaft through the mounting bracket and fasten the motor into place with two #6/32 x 5/16" -1/4 hexagon head screws -Q- and lock washers.

The "E" Unit is mounted as shown and is held in place by two #4/36 x 3/16" flat head screws -R-.

The head lamp bracket is mounted between the steam cylinders and is fastened to frame by #6/32 x 1/4" round head screw -S-.

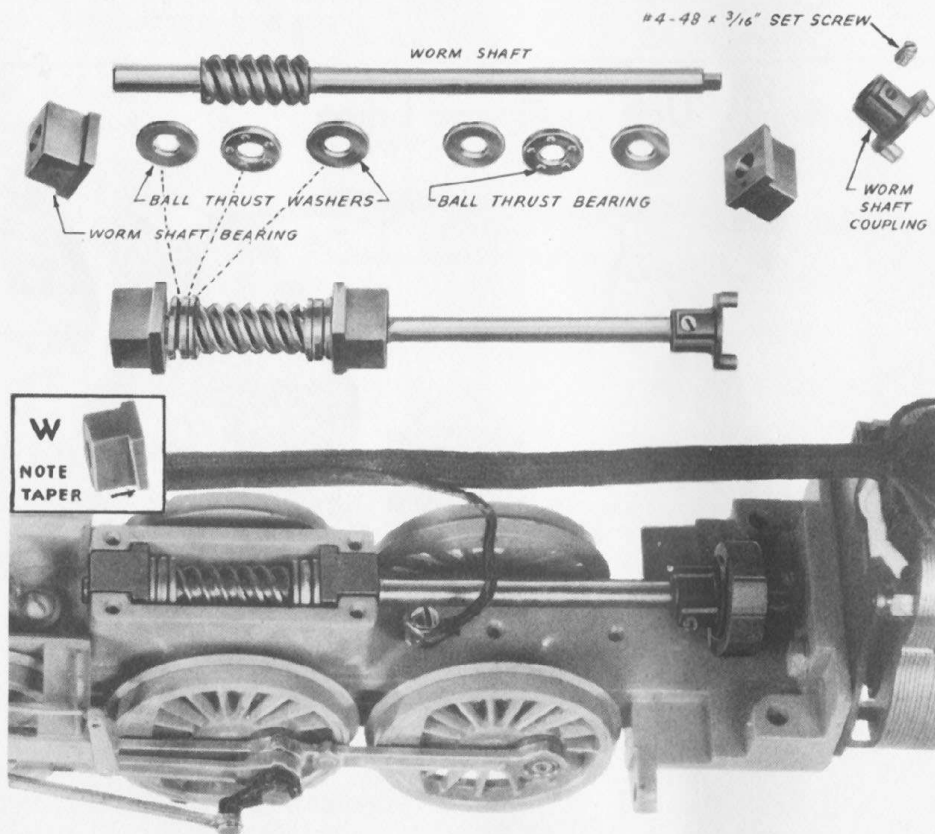
Assembly 3—Armature Shaft Coupling



Fasten the armature shaft coupling to the armature shaft with a #4/48 x 3/16" set screw -T-. Flat end of shaft goes in oval-shaped hole in coupling.

Fit the flexible coupling disc -U- on the armature coupling.

Assembly 4—Worm Shaft Assembly



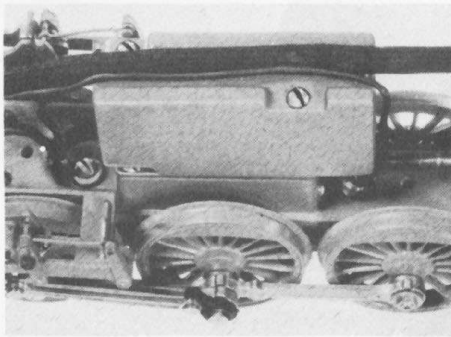
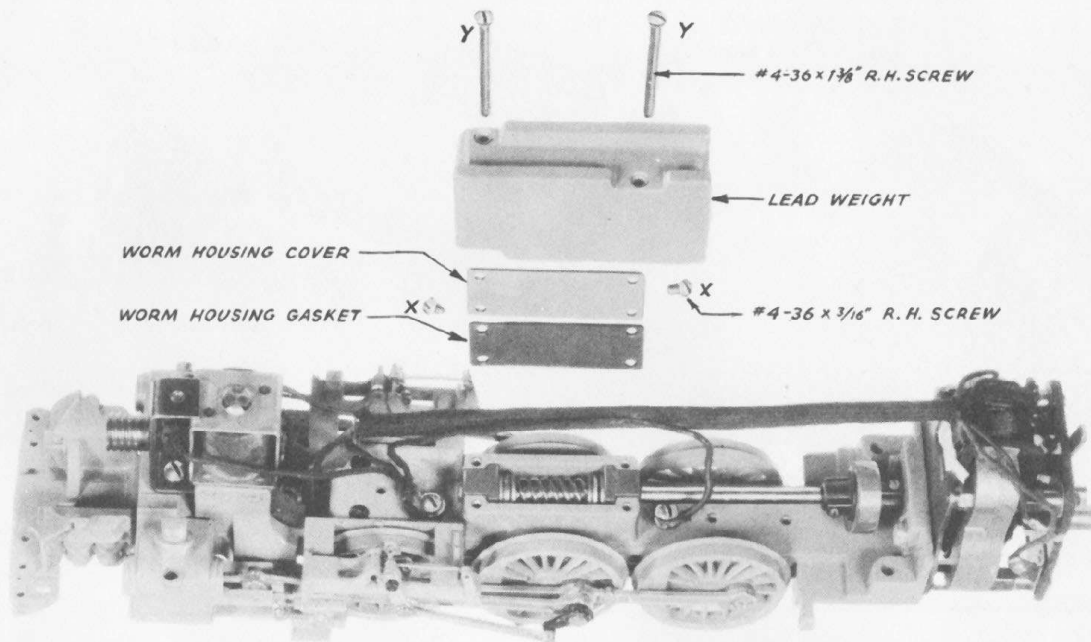
Slide the ball thrust washers, ball thrust bearings and the worm shaft bearings onto the worm shaft as shown, placing the ground side of the ball thrust washers next to the ball thrust bearings.

When this is done fasten the worm shaft coup-

ling in place with a #4/48 x 3/16" set screw -V-.

The flange on the worm shaft bearing is tapered and when fitting into position be sure the thick portion of the flange on both the front and rear bearing is on the top side as indicated at -W-.

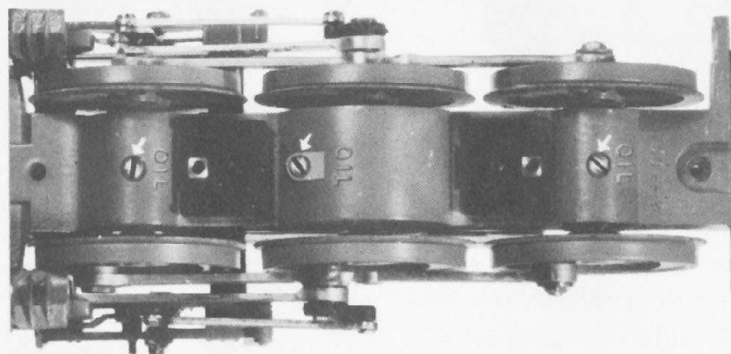
Assembly 5—Worm Housing Gasket, Cover and Lead Weight



Fill worm gearing housing about half full of Lionel Lubricant. Then, fit the worm housing gasket and cover in place and insert the two #4/36 x 3/16" round head screws -X-. Next place the lead weight on the worm housing cover and insert the two #4/36 x 1 3/8" round head screws -Y- and tighten.

Assembly 6—Oil Hole Screws

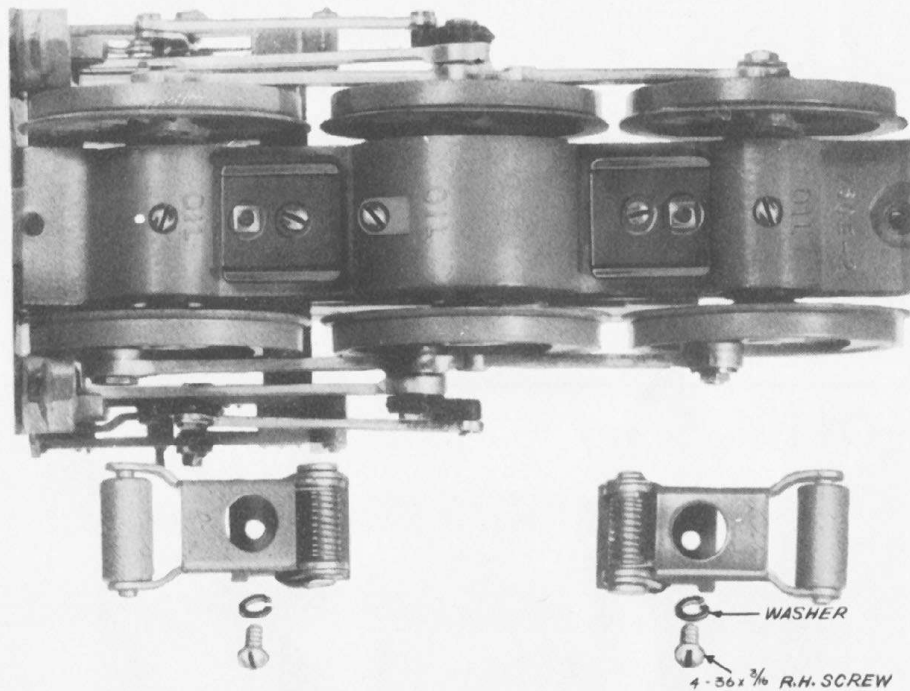
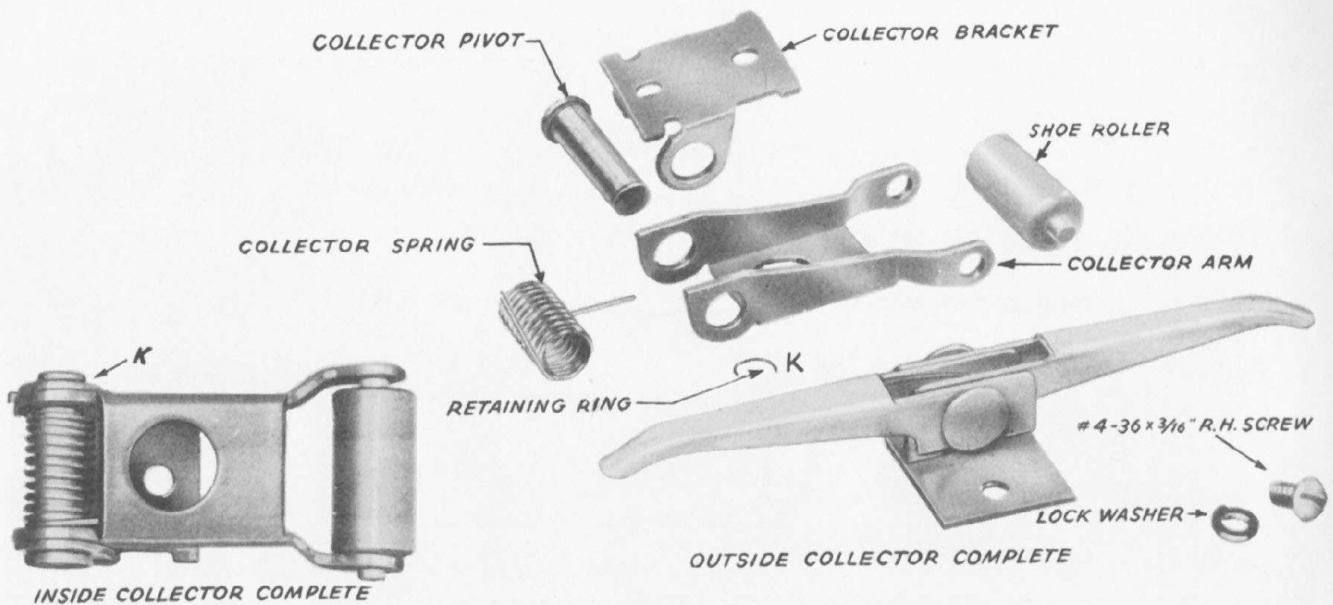
#4-36 x 1/8" BINDING H. SCREWS



The end pairs of drive wheels may be lubricated through the oil holes by inserting approximately one-fourth teaspoonful of lubricant directly from nozzle of tube. Insert the three #4/36 x 1/8" binding head screws in the oil holes and tighten.

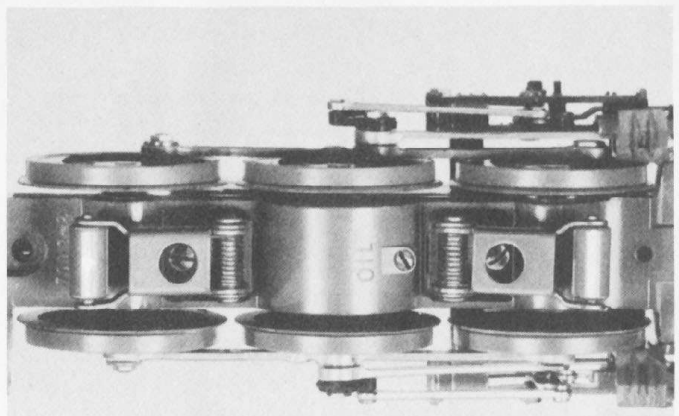
Try turning the drive wheels by hand to see if the worm rotates freely. A slight binding may be encountered in spots, which, however, is not detrimental and will be eliminated after a short period of running.

Assembly 7—Collectors



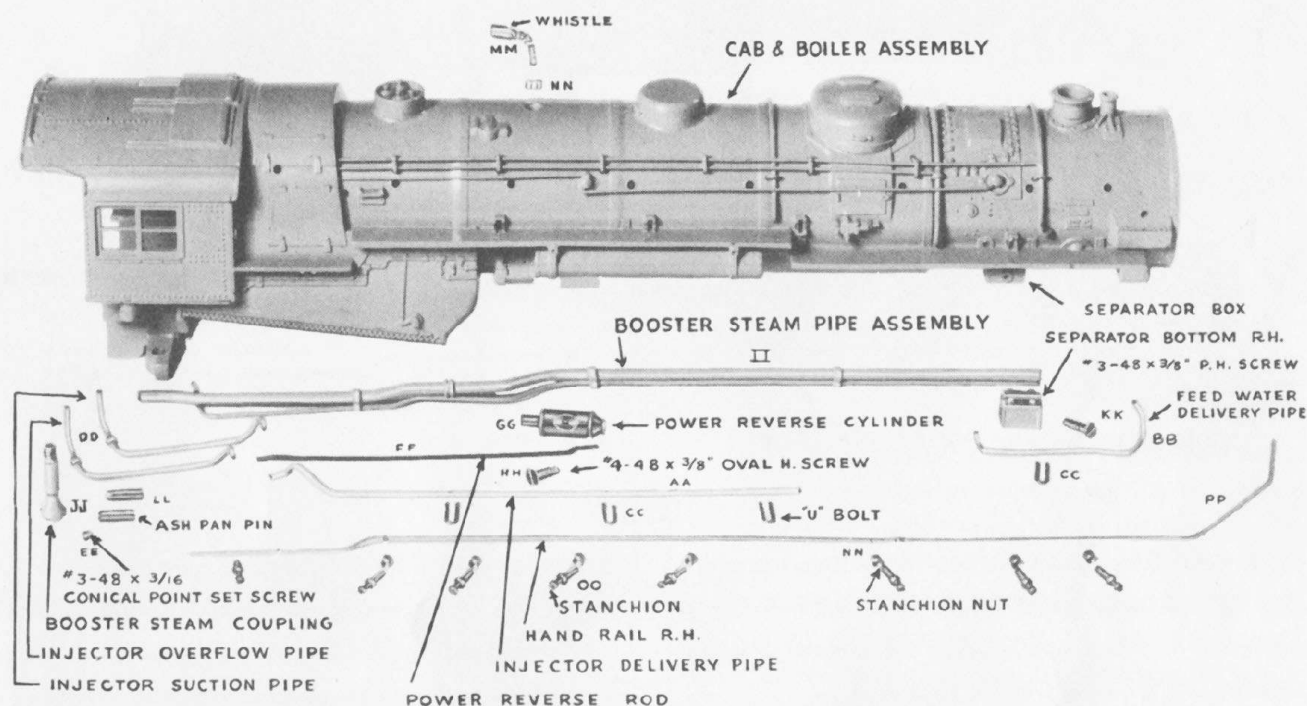
If inside collectors are to be used it will be necessary to assemble two units as shown. The parts of this type collector are locked together with a retaining ring -K-. However, if the model builder prefers the outside third rail, only one collector shoe (which is furnished assembled) will be necessary on the locomotive.

Turn the frame onto its side and fasten the collector shoes to the collector inserts with a #4/36 x $\frac{3}{16}$ " round head screw and washer as shown.



KIT No. 3 (700K-3)

Assembly 1—Boiler and Cab Assembly A-B-C-D-E-F-G



(A-1) **Injector Delivery Pipe & Feed Water Delivery Pipes**—First place the injector delivery pipe -AA- in position and fasten with three "U" bolts -CC-. The feed water delivery pipe -BB- comes next and is held with one "U" bolt -CC-. Bend the ends over the inside of the boiler.

(B-1) **Injector Suction Pipe & Injector Overflow Pipe**—Mount the injector suction pipe and the injector overflow pipes -DD- just below the cab on the right side and fasten in place with a #3/48 x 3/16" conical point set screw -EE-.

(C-1) **Power Reverse Rod & Power Reverse Cylinder**—Fit the power reverse rod -FF- into place and slide the power reverse cylinder -GG- over the end of the reverse rod. Fasten in place with a #4/48 x 3/8" oval head screw -HH- as shown.

(D-1) **Booster Steam Pipe**—Next comes the booster steam pipe assembly -II- starting on the right side of the boiler at the separator box and extending back to the under side of the cab where it is held in place by the booster steam coupling -JJ-. The forward end is held by the separator bottom and a #3/48 x 3/8" flat head screw -KK- as illustrated.

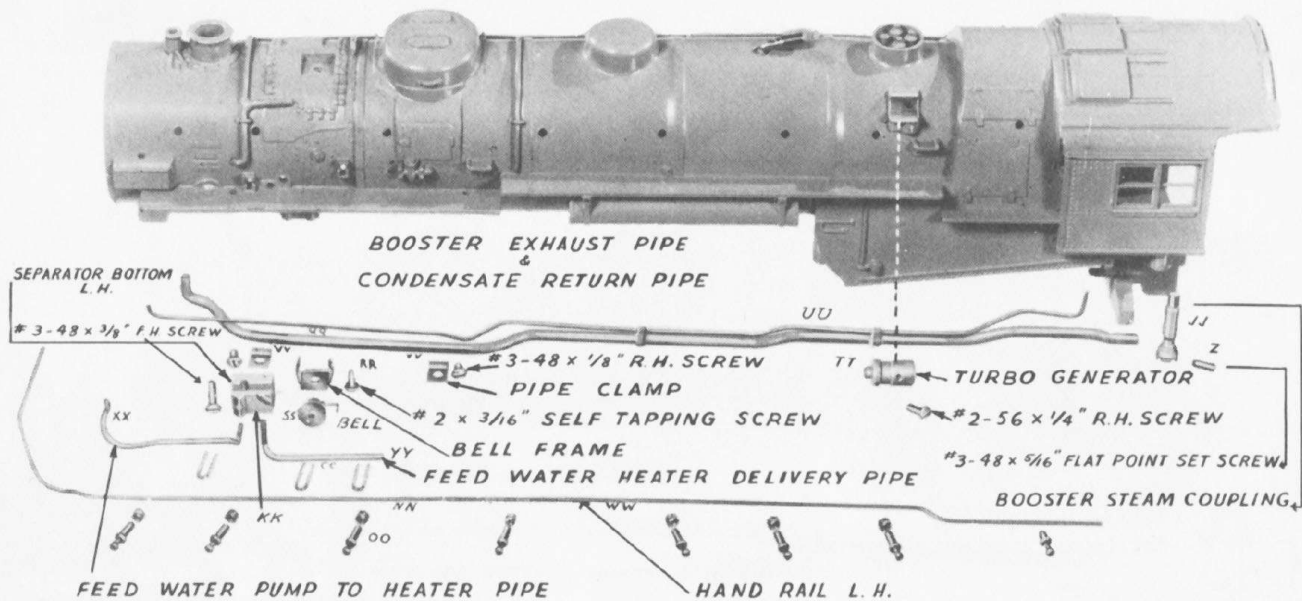


(E-1) **Ash Pan Pins**—Tap the two ash pan pins -LL- into the tail piece under the cab. The pins should protrude about 1/8" on the inside of the cab and serve as supports for the ash pan.

(F-1) **Whistle**—The ornamental whistle -MM- is mounted directly on top of the boiler and is held in place by a 1/8" stanchion nut -NN-. After assembling, bend over stem of whistle to about 90° angle, as shown in top illustration.

(G-1) **Right Handrail**—The handrail stanchions -OO- are inserted in the side of the boiler and the nuts -NN- started. The right and left stanchions that are nearest the cab do not take nuts and should be clipped off with a pair of cutting pliers to give clearance for the motor. Slide the right handrail -PP- into position and tighten the 1/8" stanchion nuts with proper wrench supplied with kit.

Assembly 2—Boiler and Cab Assembly (Left Side) A-B-C-D-E



(A-2) Bell—Fasten the bell frame -QQ- in place with a #2 x 3/16" self-tapping screw -RR-. Place the bell -SS- in the frame as shown and squeeze the projecting prongs together with a pair of pliers to hold in place.

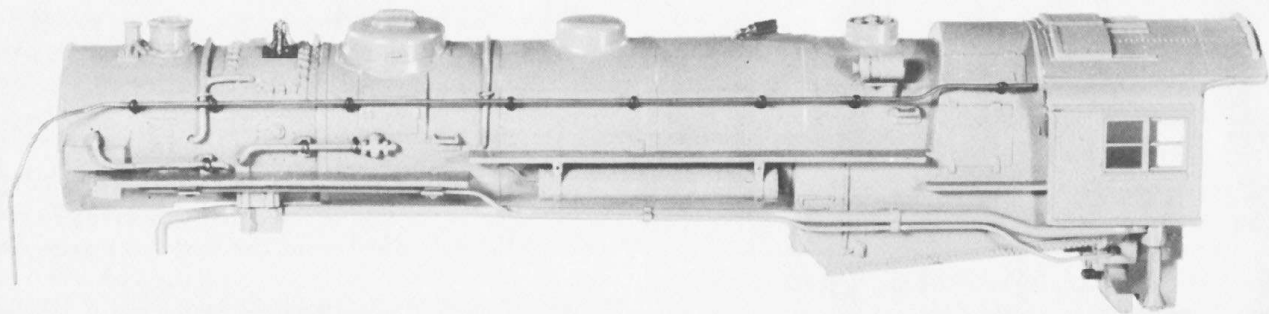
(B-2) Turbo Generator—Ahead of the turret below the valve cluster, the turbo-generator -TT- is mounted and held in place with a #2/56 x 1/4" round head screw.

(C-2) Feed Water Pipe & Pump to Heater Pipe—Next mount the feed water heater delivery pipe -YY- as shown secured with two "U" bolts -CC- and the feed water pump to heater pipe -XX- fastened with one "U" bolt.

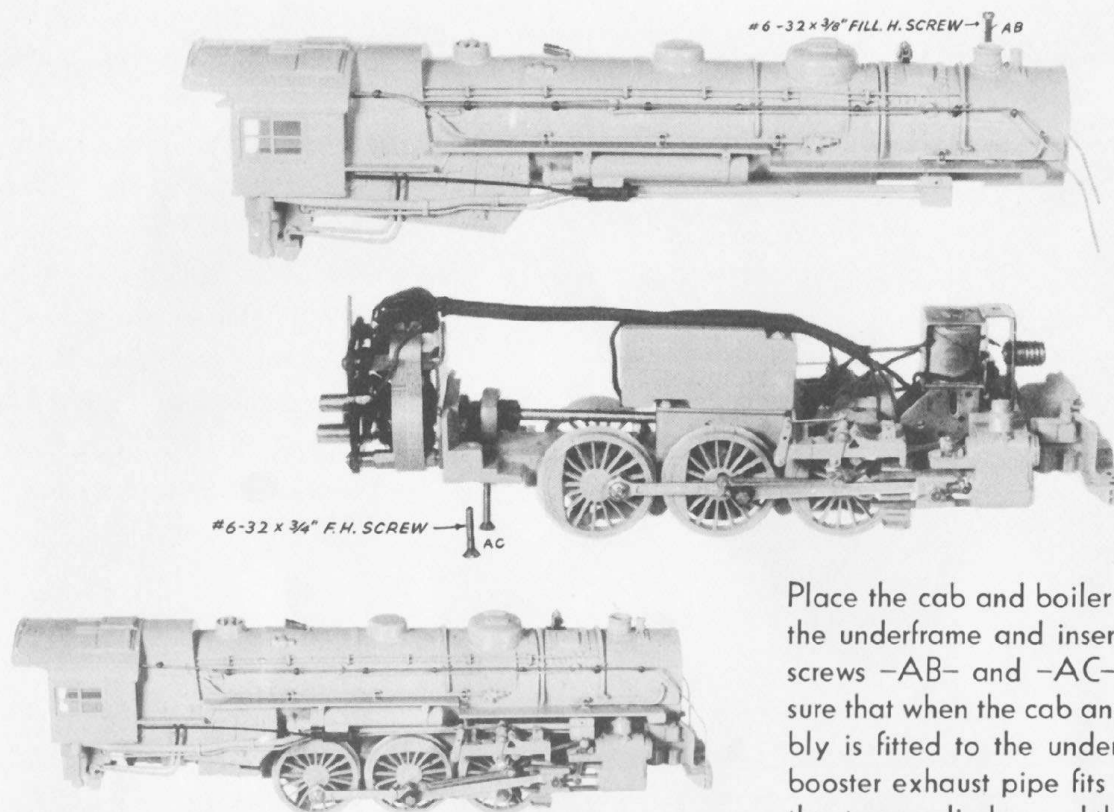
(D-2) Booster Exhaust Pipe Assembly—The booster ex-

haust pipe and the condensate return pipe assembly -UU- starts at the left steam chest and extends back to the under side of the cab. The booster exhaust pipe is held at the front of the boiler by the separator bottom -KK- and a #3/48 x 3/8" flat head screw, and at the rear by the booster steam coupling -JJ-. The condensate return pipe is supported under the front cat-walk by clamps -VV- (use #3/48 x 1/8" screw) and at rear with a #3/48 x 5/16" flat point set screw -Z-.

(E-2) Left Handrail—The handrail stanchions -OO- are inserted in the side of the boiler and the nuts -NN- started. Slide the left handrail -WW- into place and tighten the 1/8" stanchion nuts.



Assembly 3—Cab and Boiler to Frame

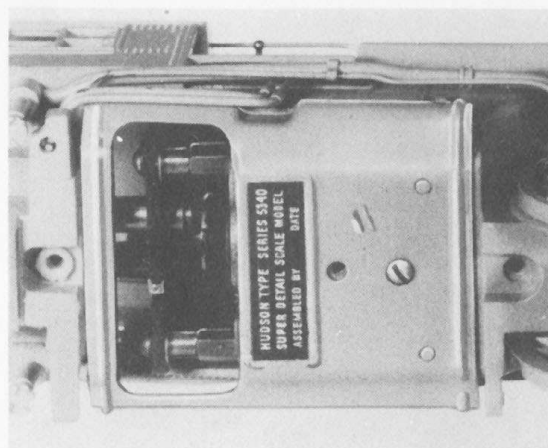
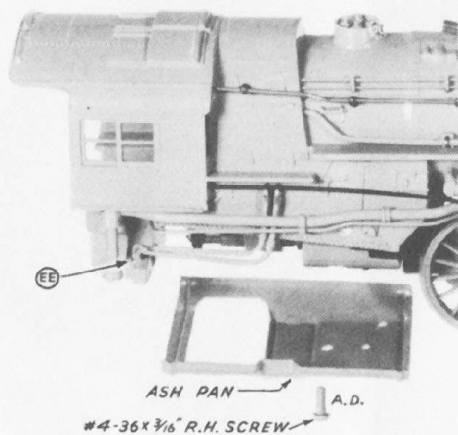


Place the cab and boiler assembly onto the underframe and insert the mounting screws -AB- and -AC- as shown. Be sure that when the cab and boiler assembly is fitted to the underframe that the booster exhaust pipe fits into the top of the steam cylinders and the handrails are inserted in the holes in frame as shown.

KIT No. 4 (700K-4)

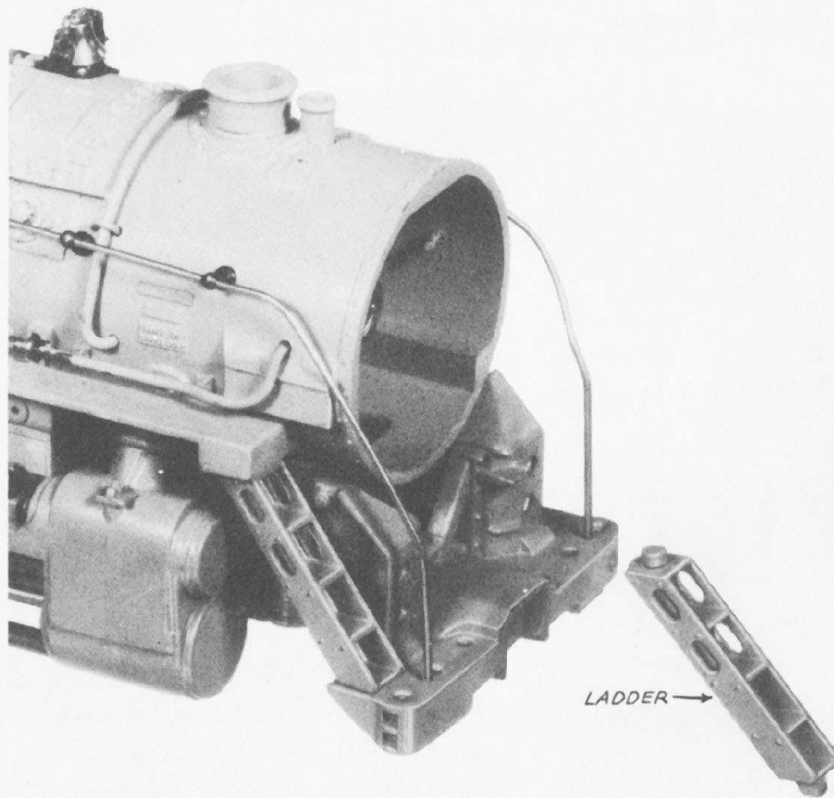
Assembly 1—Ash Pan

The ash pan is mounted on the under side of the frame directly beneath the cab and turret. It is held in place with a #4/36 x 3/16" round head screw -AD-, and two pins in the rear of frame. If the ash pan does not fit freely



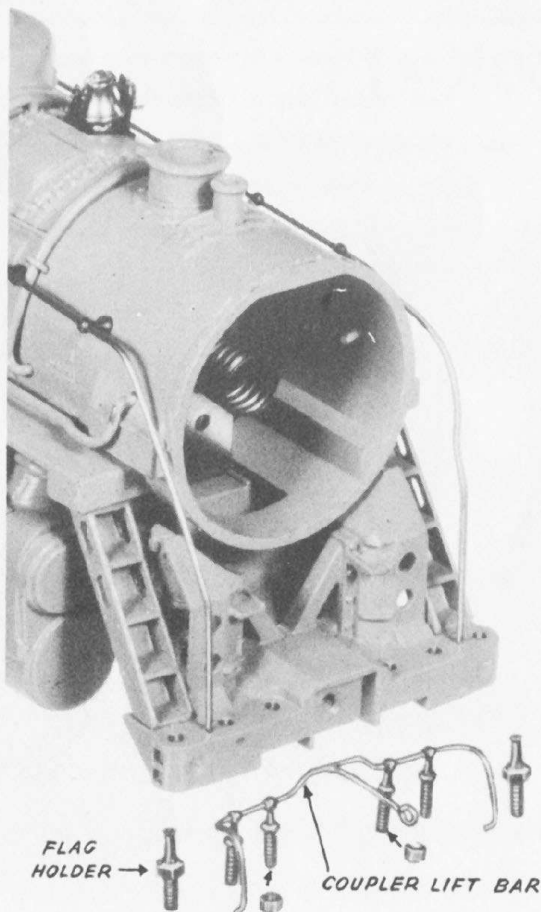
into place it may be necessary to loosen the set screw -EE- that holds the injector suction pipe and the injector overflow pipe and spring them up and out until the pan is in its correct position.

Assembly 2—Ladders



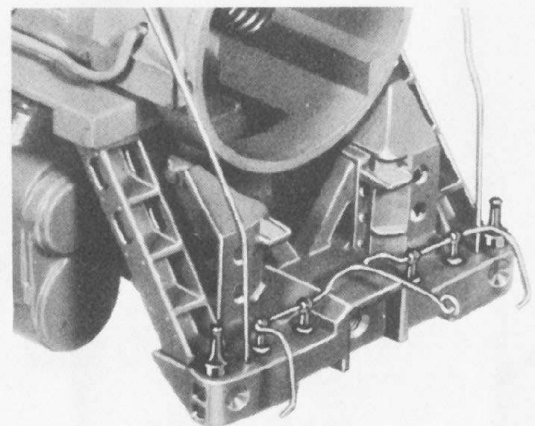
Next assemble the ladders leading from the cross bar on the pilot to the under side of the cat-walk on the sides of the boiler. Loosen the #6/32 x $\frac{3}{8}$ " fillister head screw in the smokestack and raise the front end of the boiler just enough to let the ladders fall into place, lower the boiler and tighten the screw.

Assembly 3—Coupler Lift Bar Assembly and Flag Holders



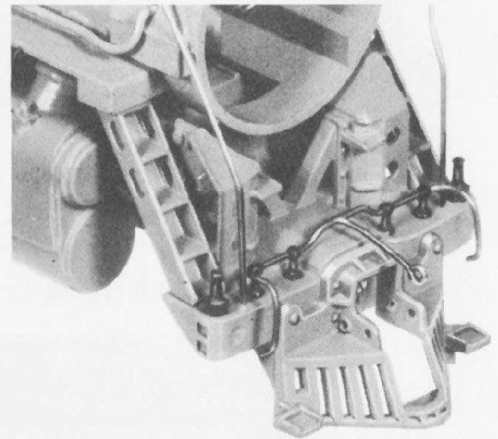
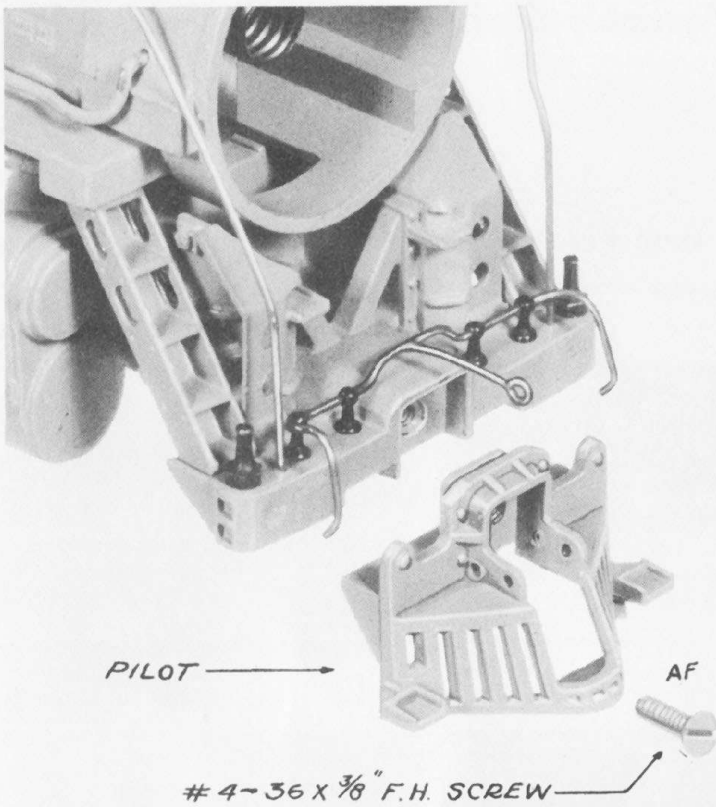
The coupler lift bar assembly is mounted to the cross bar of the pilot as shown. The two inside stanchions only are fastened with $\frac{1}{8}$ " nuts.

Insert the flag holders into the cross bar and tighten.



Assembly 4—Pilot

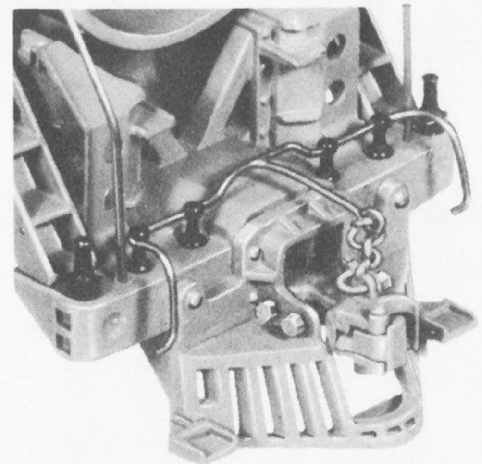
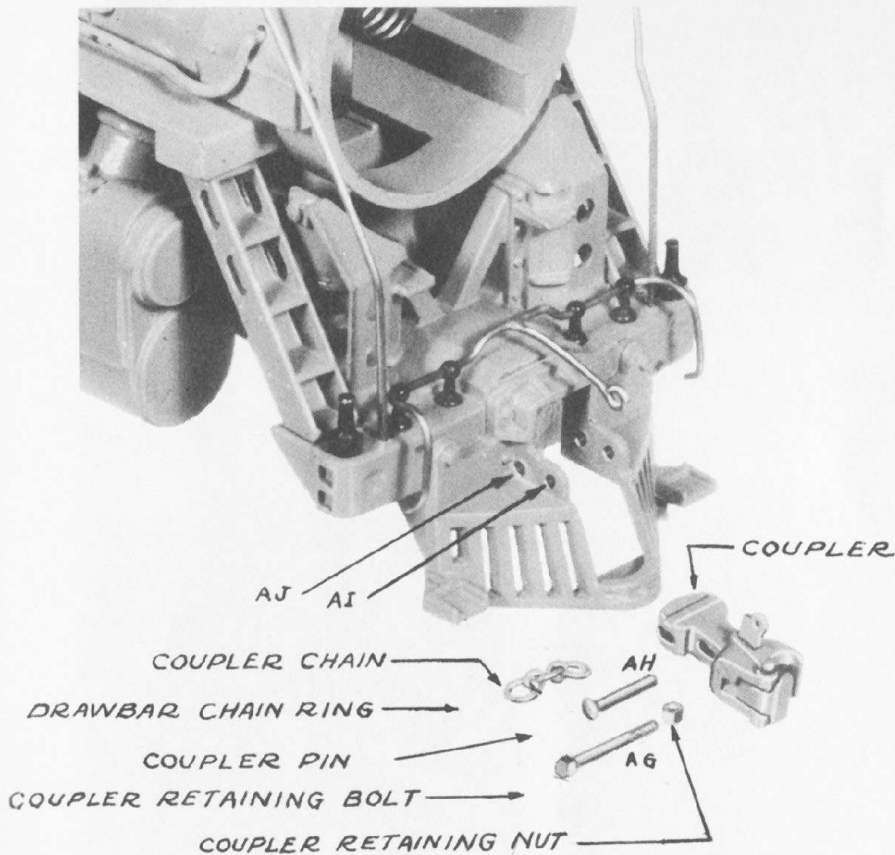
The pilot or "cow-catcher" is next mounted directly to the front of the under frame and held in place with a #4/36 x 3/8" flat head screw -AF-.



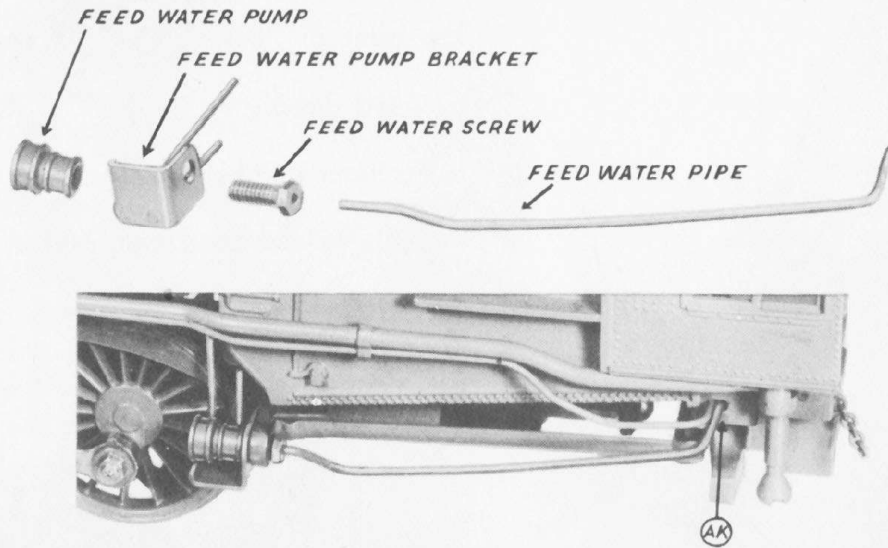
Assembly 5—Coupler Assembly and Coupler Chain

The coupler comes in one complete unit and is attached to the pilot with a coupler retaining bolt and nut -AG- in the forward hole in the pilot -AI- and with a coupler pin -AH- in the rear hole -AJ-.

Connect the coupler chain between the coupler lift bar and the coupler lock bar.

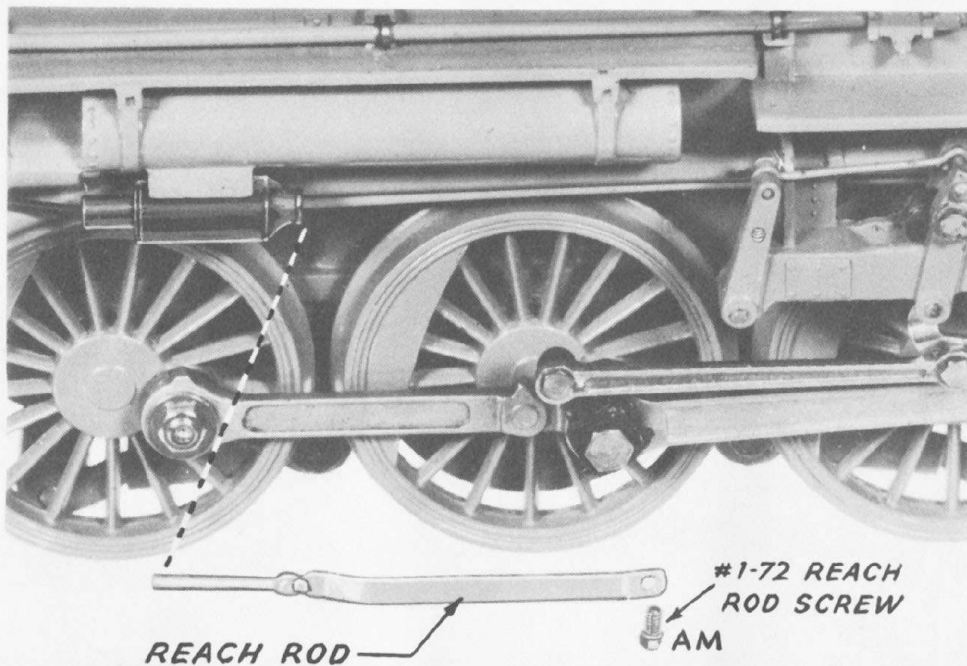


Assembly 6—Feed Water Pump and Pipe

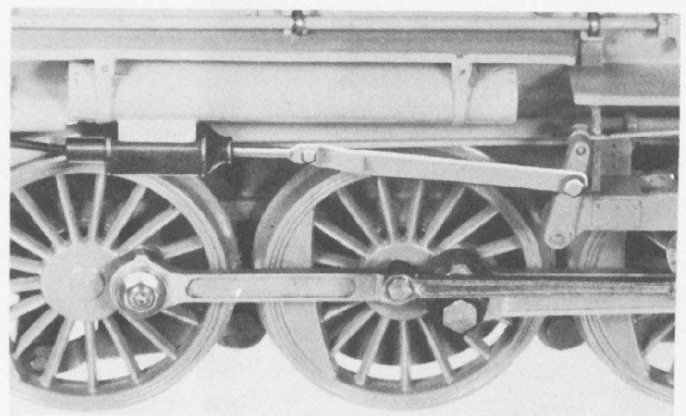


The feed water pump assembly is mounted on the left side at the rear of the drive wheels as shown. Slide the straight end of the feed water pipe into the head of the feed water pump screw and insert the other end in the slot -AK- alongside the condensate return pipe and tighten the clamp set screw holding both pipes in place.

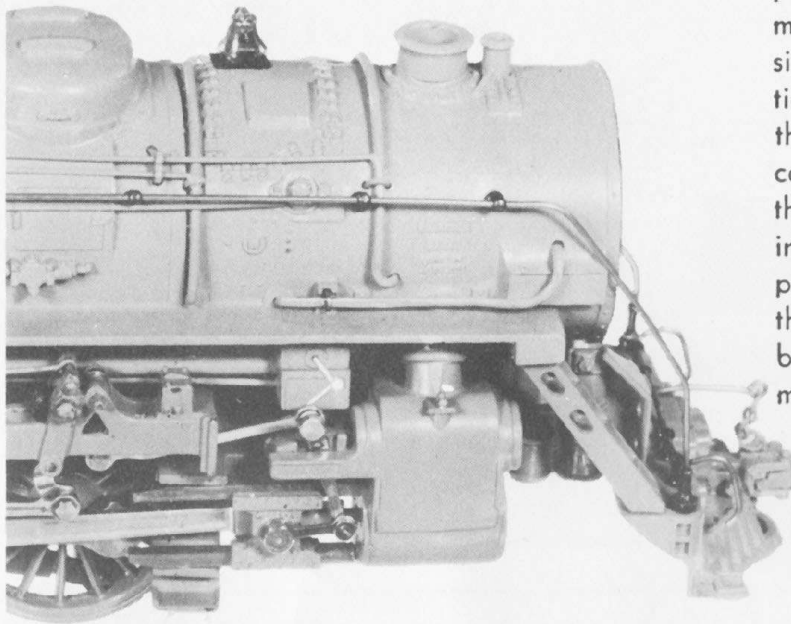
Assembly 7—Reach Rod



Slide the reach rod into the front of the power reverse cylinder and fasten the flat end to the valve assembly with a #1/72 hexagon screw -AM-.

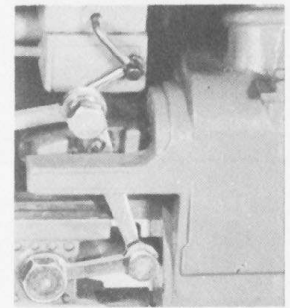


Assembly 8—Lubricator Levers



LUBRICATOR LEVERS

Next comes the lubricator levers. This assembly will require a little patience as the part is small and there is little freedom of movement. First turn the model on its left side and remove the radius rod, combination lever screw. Hook the lower segment of the lubricator lever into the radius rod and combination lever from the back side and then push the upper segment into the hole in the boiler casting directly above. Replace the screw which is drilled to receive the lubricator lever and tighten. If the model builder has a pair of tweezers handy they may be used here to good advantage.

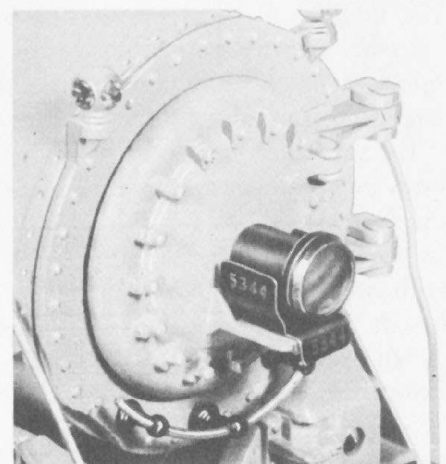
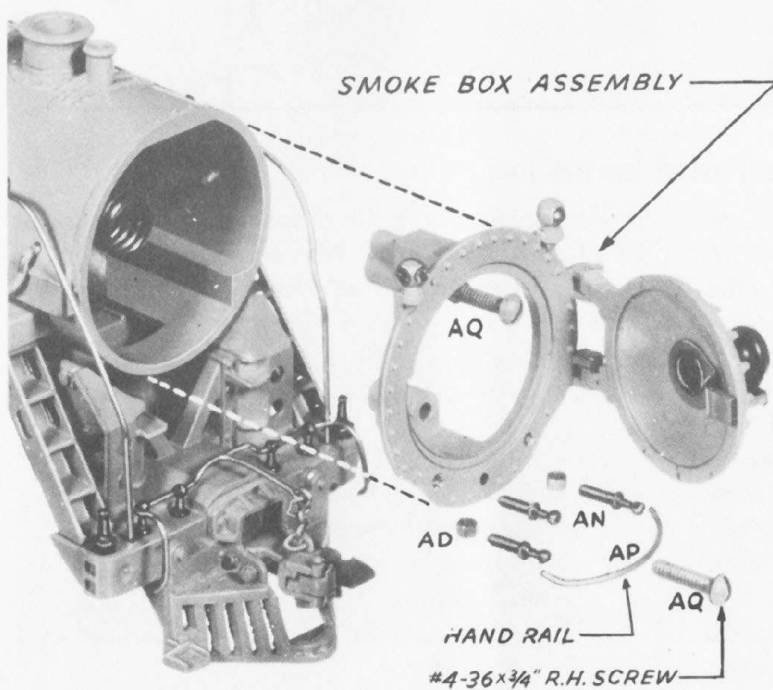


Assembly 9—Smoke Box

The smoke box assembly comprises the smoke box front, which supports the pilot lights and the handrail, and the smoke box cover carrying the head light and number plate. The smoke box

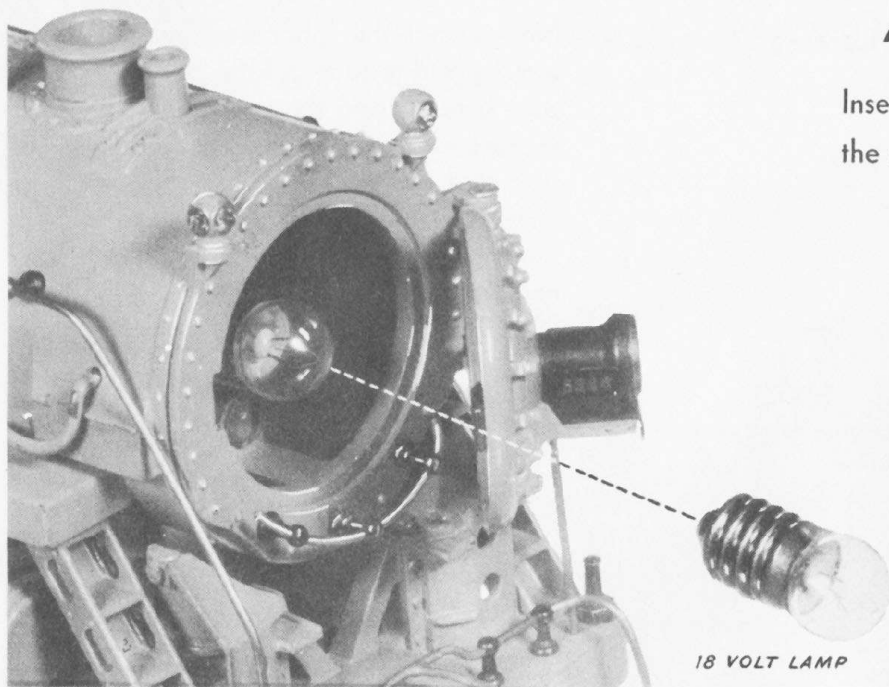
cover is hinged directly to the smoke box front. Insert the three stanchions -AN- into the lower front of the smoke box front and slide the handrail -AP- into place. Secure the two outside stanchions with $\frac{1}{8}$ " stanchion nuts -AD-. Bend in the ends of the handrail toward the smoke box.

Slide the smoke box front assembly into boiler, fasten in place with two #4/36 x $\frac{3}{4}$ " round head screws -AQ-.



Assembly 10—Headlight

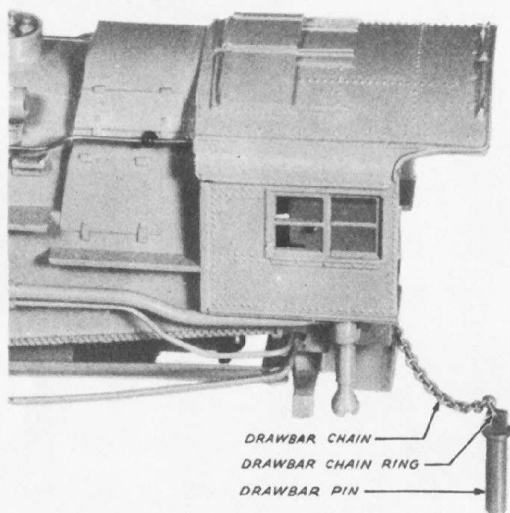
Insert the special 752-9 lamp through the smoke box front.



18 VOLT LAMP

Assembly 11—Draw Bar

Assemble the draw bar and chain and fasten to the lower-left, rear side of the cab as shown. A pair of pliers may be necessary to close the ring.



Painting and Lettering

After pilot and trailer trucks are assembled, as shown on next page, the locomotive is ready to be taken apart, cleaned, and painted. While the locomotive may be painted without being taken apart, a much better job can be done by painting each part separately.

Be sure that all surfaces are clean and free from oil and grease. Benzine or naphtha may be used, or any good household cleaning fluid such as Carbona, Triclene, etc. Wipe the parts dry with a soft cloth. Do not handle parts with bare hands after cleaning, but use a clean cloth.

Mix paint well and apply with a good brush. Paint first the parts that have been given a grey

priming coat. As to the other parts, the choice of painting is optional. No chromium plated or stainless steel parts should be painted. If galvanized pipes are painted black, their appearance will be improved. Allow paint to dry at least two hours then re-assemble engine and apply transfers.

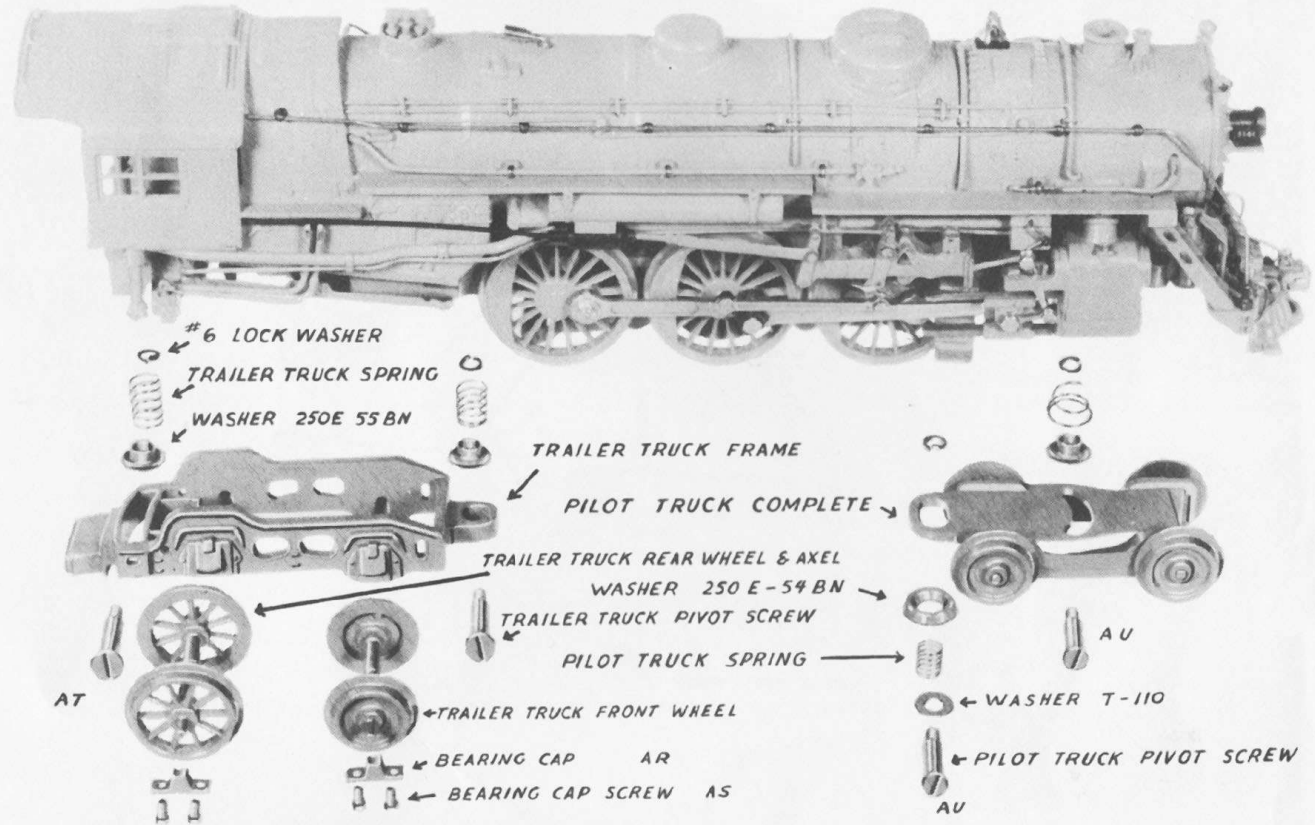
- 1—Dip transfer in water ten or fifteen seconds to loosen it from paper.
- 2—Slide transfer off paper, face up, onto desired location.
- 3—Press down with soft rag or blotter and allow to dry.

Painting and Lettering—Continued

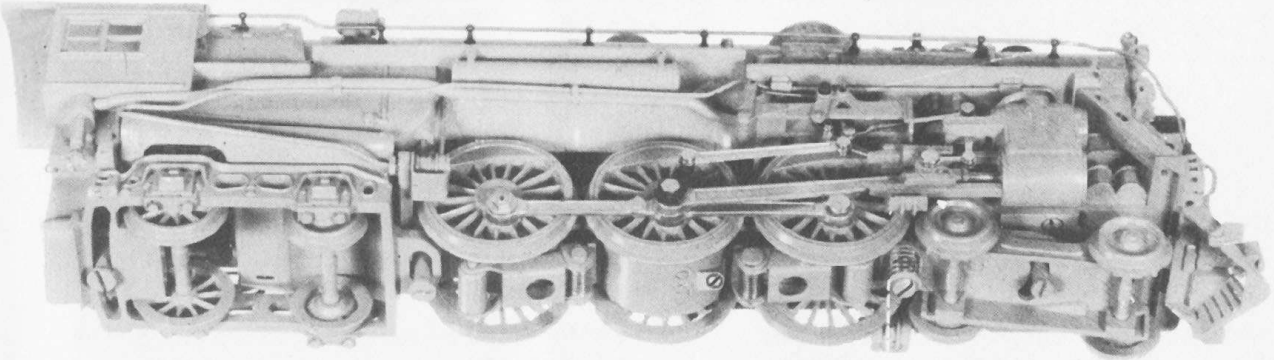
Be sure all water and air bubbles are removed from under the transfer.
 A nameplate is included in Kit No. 4 on which

space has been provided for the owner to inscribe his name and date of assembly. This nameplate should be fastened to underside of ash-pan.

Assemblies 12 and 13—Pilot and Trailer Trucks



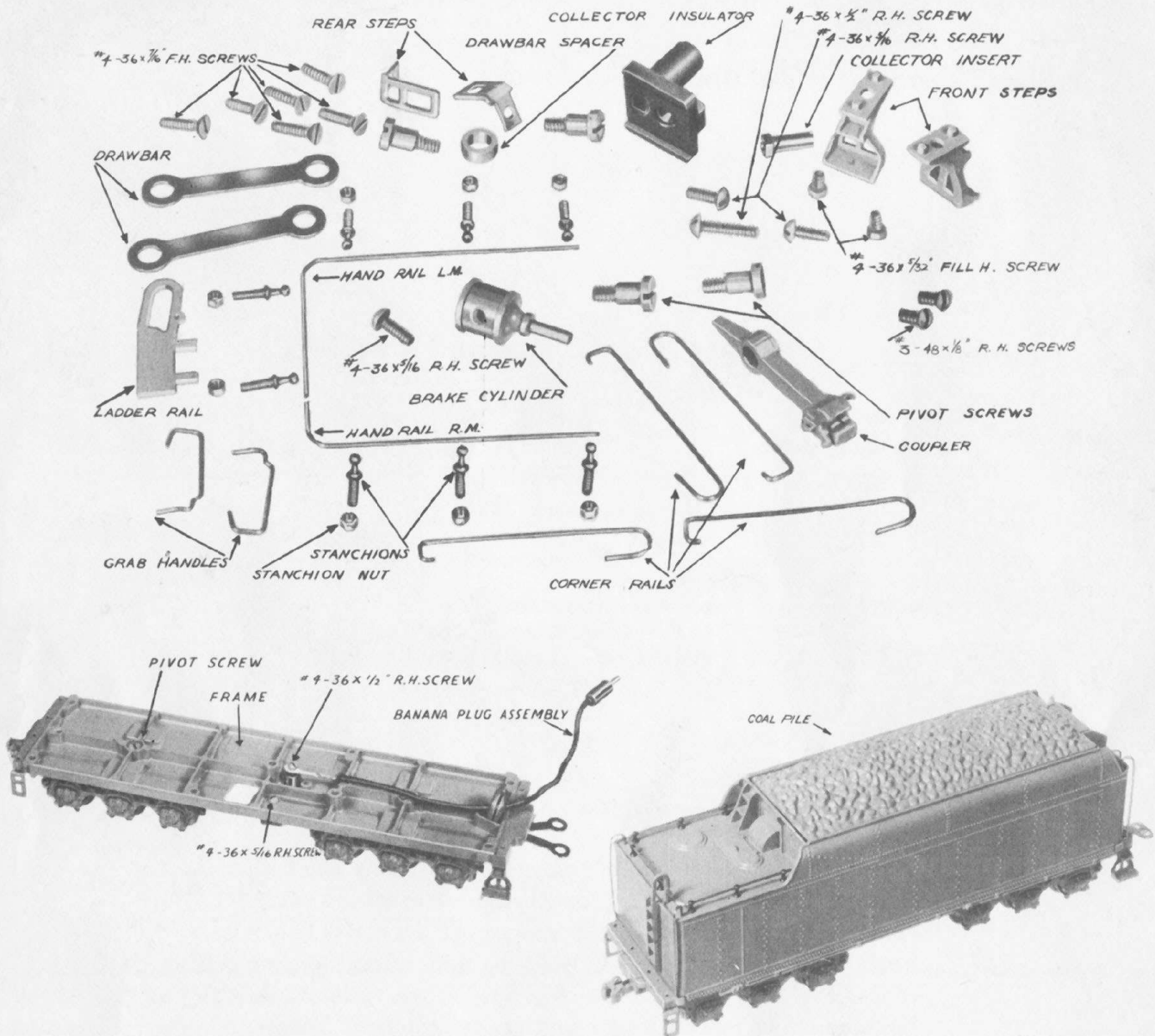
Assemble the trailer trucks, fastening the wheels in place with the bearing caps -AR- and bearing cap screws -AS-. Turn the engine up side down and mount the trucks to the frame. The long screws -AT- hold the trailer (rear) truck in place, and the short screws -AU- secure the pilot truck. Note carefully the position of spring and washers. Washer 250E-54BN goes in center long slot assembly. Alternate position shown in illustration with long-necked washer. In assembling, make sure the cup side of both washers is up.



NOTE POSITION OF SPRING

KIT No. 5 (700K-5)

Tender Assembly



The assembly of the tender is a very simple procedure and with only a few words of explanation the model builder will find the assembly illustration sufficient.

It is again advisable to first assemble the unit then take it apart, clean, and paint, as it is almost impossible to reach all surfaces around the trucks or to avoid getting paint on the grab handles and handrails.

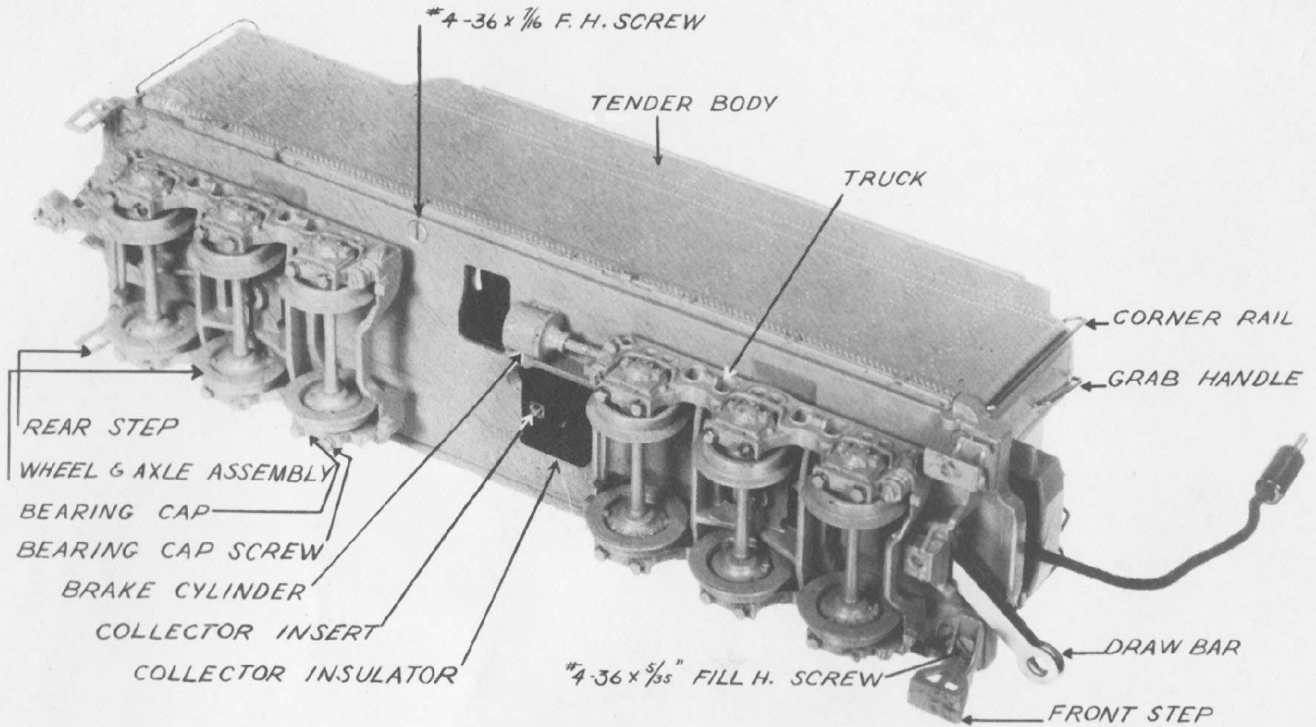
Mount the coupler before the rear truck is in position as the coupler mounting screw cannot be inserted if the coupler is mounted last.

If an outside third rail is used it will be necessary to mount the outside collector, which is held by a #4/36 x 3/16" R.H. screw and lock washer.

See that the ladder extension at the rear of the tender fits flush and appears as a continuation of the cast rail; if not, it may be necessary to remove any chips or burrs from the mounting holes to insure proper fit. When in place, give the two fingers that extend through to the inside of the tender a slight twist with a pair of pliers to hold tight.

Apply the transfers according to instructions in the same manner as for the locomotive.

Tender Assembly—Continued



KIT No. 6 (700K-6)

Whistle

Remove the body of the tender and connect the lead from the brush plate on the whistle to the collector insulator along with the terminal of the banana plug assembly. Both terminals are held in place with a #4/36 x 1/2" round head screw -AV-.

Secure the whistle to the frame with two #6/32 x 5/8" flat head screws -AW-. Replace the tender body.

The whistle controller is wired to the track according to separate instruction sheet enclosed with the kit.

