

HO Plastic &
Lost Wax Brass

CAL SCALE

Passenger Car Parts

A Division of
Bowser Mfg.
1302 JORDAN AVE
PO BOX 322

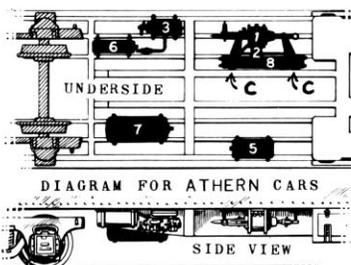
MONTOURSVILLE, PA 17754

PHONE: 570-368-2379 9:00 to 5:00 Eastern Time:

Orders: 800-327-5126 9:00 TO 5:00 Eastern Time

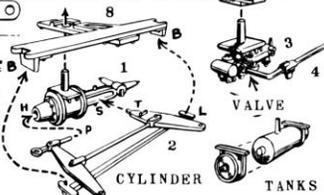
FAX: 570-368-5046 (24 hours a day)

Westinghouse "UC" Air Brake System for All Standard Steel Passenger Cars #190-300



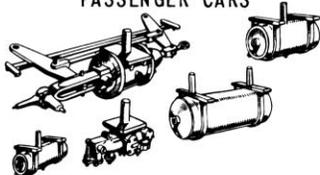
All the basic castings are included. Wire for the piping is not included but the sizes of the prototype pipes are noted for the modeler who wishes to go to that detail.

ASSEMBLY OF UNITS



IMPORTANT-Separate parts from runners with **EXTREME CARE** using a razor blade. Assemble first, the Tanks and Valve, then the Cylinder as follows. Insert piston "P" in hole "H" then snap tip "T" into slot "S". Now slip on bracket "8" and glue the lever supports "L" to bracket at "B" (two points). Last lightly glue levers to Cylinder at "H" and "S". The basic units are now assembled.

WESTINGHOUSE TYPE "UC" AIR BRAKE SYSTEM FOR ALL STANDARD STEEL PASSENGER CARS



AB-300 CAL-SCALE

ATTACHING THE SYSTEM TO CARS

If your car is an **ATHERN** or like car, with a deep center beam, the levers must be cut off ("C" in **ATHERN** diagram) flush with bracket.

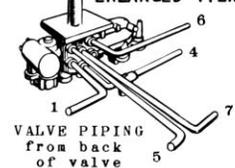
Shown here is the standard arrangement of parts. In most cases the Brake Cyl., will be close to side of car. The location shown is on cars with a shallow center beam or old wooden cars modernized.

The Brake Set may be located in the middle of the car or towards either end depending upon what other equipment is under the car.

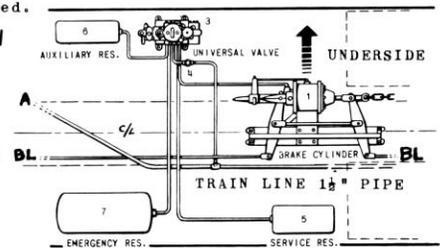
The Train Line "A" continues to the ends of the car where the air hoses attach. The Brake Lever Rods "BL" run to each of the trucks.

All pipes but the Train Line are 1" Diameter. Rest are 1/2".

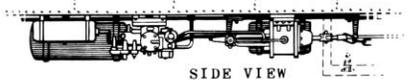
ENLARGED VIEW



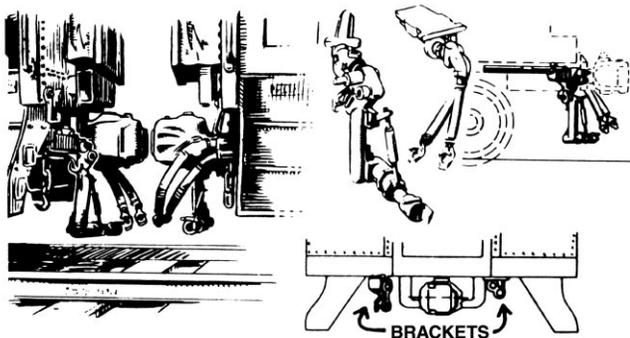
- 1-Brake Cylinder
- 2-Lever assembly
- 3-Universal Valve
- 4-Cent. Dust Collector
- 5-Service Reservoir
- 6-Auxiliary Reservoir
- 7-Emergency Reservoir
- 8-Cylinder Bracket
- 9-Univ. Valve Bracket



DRAWN TO ACTUAL "HO" SCALE



Air, Steam and Signal Hoses For passenger cars and express reefer cars #190-275

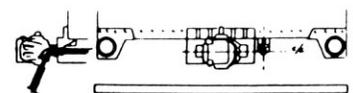


STANDARD PASSENGER CAR STEAM, AIR AND SIGNAL HOSES

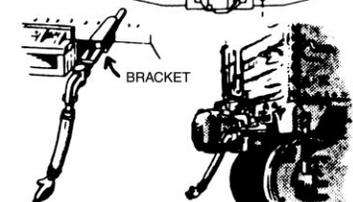
Used on passenger and express reefer cars. 12 hoses and needed brackets, enough to equip TWO passenger cars.

#190-275 Plastic

FREIGHT CAR AIR HOSES



PLASTIC OR BRASS



For realistic effects hoses may be bent into a semi curved position.

FREIGHT CAR STANDARD AIR HOSES

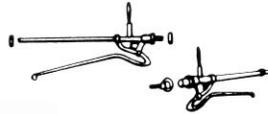
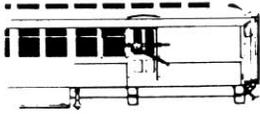
Air hoses for freight cars of all types and cabooses. 20 hoses and brackets, enough to equip TEN cars.

#190-276 In Plastic

STANDARD AIR HOSES IN BRASS

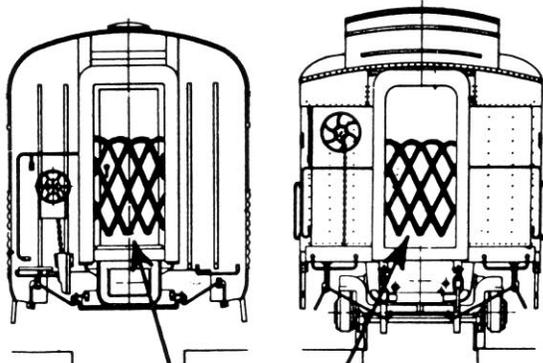
For locomotives, tenders and all types of cars. 4 hoses cast in brass

#190-277 In Brass



#190-345 Mail Catcher

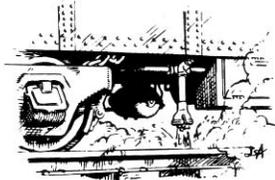
Mail Catchers for your RPO cars. Used on cars of all eras from wood to the modern streamline RPO cars. A sharp realistic bit of detail.



PASSENGER CAR SAFETY TAIL GATES

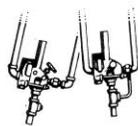
HIGHLY DETAILED TAIL GATES. EVERY RIVET THERE. SO REALISTIC IT LOOKS AS IF YOU COULD ACTUALLY FOLD THEM UP. A BEAUTIFUL FINISHING TOUCH FOR YOUR PRIZED "VARNISH" OR STAINLESS STEEL GEN.

- #190-309 Passenger Car Safety Gate - Brass (pair)
- #190-486 Passenger Car Safety Gate - Plastic (pair)



**#190-350 (pair)
VAPOR TRAPS**

Standard and Streamline passenger cars. Average application, two to a car.

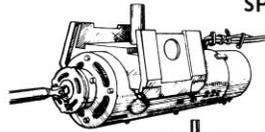


**Steam Vapor
Traps
For Streamline
passenger cars
#190-358 pair**

The average car uses four traps. Baggage and RPO cars use two. Some heavier cars, like Dinners and Lounge cars use six. The illustration, above right, shows the placement of both Vapor Traps and Receptacles.



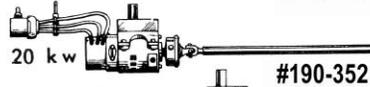
SPICER DRIVE GENERATORS



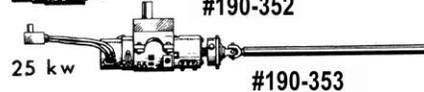
The 20kw and 25kw can be used on all streamline cars. The 35kw is for very late model cars.



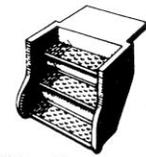
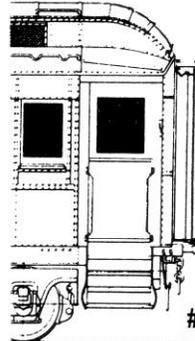
35 kw #190-357



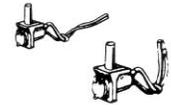
20 kw #190-352



25 kw #190-353



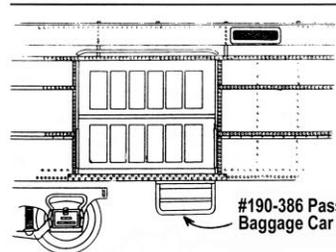
Standard
Steel
Passenger
Car Steps
(flaired sides)
#190-356 (4pcs)



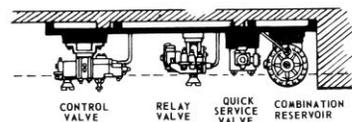
**AIR CONDITIONING
RECEPTACLES
#190-355 Pair**



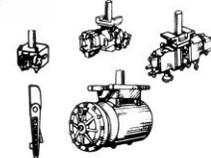
**BATTERY
RECEPTACLES
#190-354 Pair**



#190-386 Passenger and
Baggage Car Steps (4)



Streamline passenger car air
brake set with brake handle
and equipment mounting rack.



**HSC WEBCO
Brake Set
#190-359 6 Pcs Set**



#190-348 Generator
Standard and Streamline
era passenger cars.



**#190-365
Alternator**