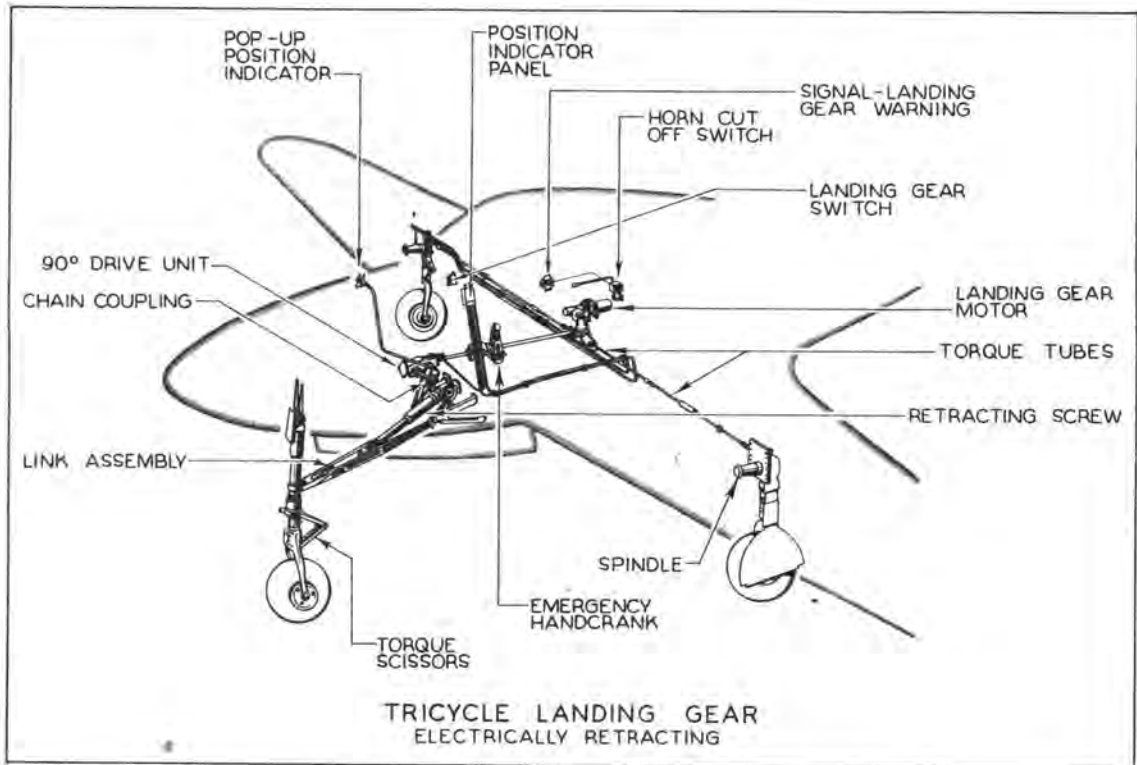




LANDING GEAR



PURPOSE:

The landing gear assembly has four primary functions, namely: stabilizing, shock absorbing, braking and steering the aircraft.

A. STABILIZING.

This function represents the ability of the landing gear to form a stable contact with the ground in both landing and take-off. It assists the plane in obtaining the desired flight attitude while the wheels are rolling over the landing field at a relatively high rate of speed; it also permits a safe flight attitude to be used in landing the plane.

B. SHOCK ABSORBING.

When alighting the landing gear must absorb both the vertical and lateral force of the airplane which varies in magnitude with the type of aircraft, the ability of the pilot and other physical conditions such as weather, size and quality of the airfield, etc.

The absorption of the forces mentioned above must be efficient enough so that the primary structure of the aircraft is not stressed or injured.

C. BRAKING.

The landing gear must also allow an efficient method of controlling ground movement so that the landing speed of the plane can be arrested within the confines of the airport.

D. STEERING.

The landing gear should provide an effective method of steering the plane on the ground and thereby allow a controlled maneuverability without danger to personnel and aircraft nearby.

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LANDING GEAR

(Continued from Page 1)

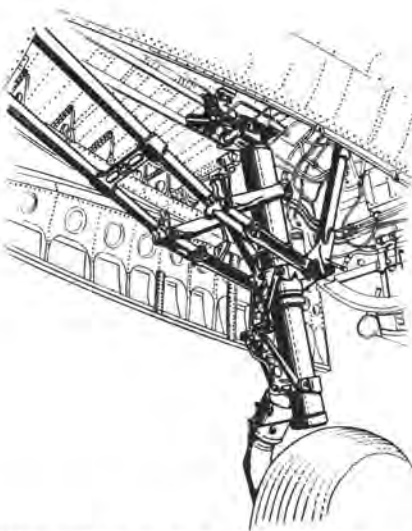
DESCRIPTION:

Primarily the conventional landing gear can be divided into five major groups:

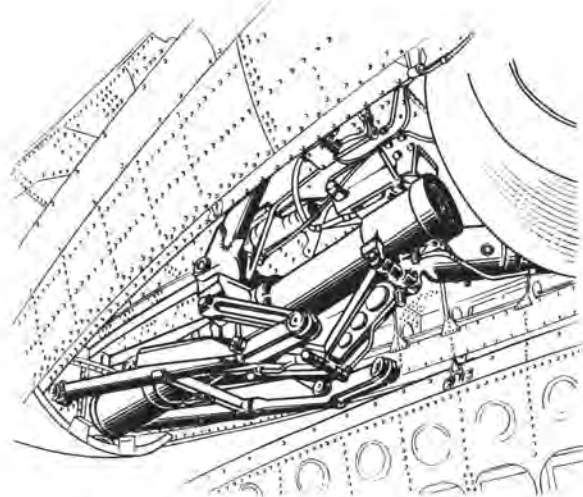
A. Retracting mechanism, B. Struts, C. Wheels and Brakes, D. Casings and Tubes
E. Steering System.

A. RETRACTING MECHANISM.

The retracting of the wheels of an aircraft considerably increases its flight characteristics in regard to speed, rate of climb, etc. The common method of retracting landing gear usually employs a hydraulic cylinder which transmits the motive force of high pressure hydraulic fluid into mechanical motion to raise and extend the gear. The size and location of the retracting mechanism with respect to the strut is dependent upon two factors; namely, the weight of the assembly and the direction of retraction. By direction of retraction is meant the direction of wheel travel whether backward, forward, inward, or outward.



MAIN LANDING GEAR IN EXTENDED POSITION



MAIN LANDING GEAR IN RETRACTED POSITION

The pressure in the hydraulic cylinder is usually between 850 pounds per square inch (p.s.i.) and 3000 p.s.i. and is supplied from the regular aircraft hydraulic system. The hydraulic retracting cylinder is linked to suitable levers to accomplish the retraction and extension in a minimum time. On some types of aircraft the use of an electric motor, geared to the proper reduction is used in lieu of the hydraulic cylinder mentioned above.

It should be noted that in connection with retracting mechanism there is always an emergency method of raising and lowering the landing gear. This auxiliary system is either a hand crank mechanical device or a hydraulic hand pump, whose linkages or fluid lines are entirely separated from the regular system. Both the up and down positions of the landing gear control lever are held in place by a suitable locking arrangement and in planes having a co-pilot seat the control handle is located so that it is accessible to both the pilot and the co-pilot.

All military aircraft are equipped with either a warning light or a horn which gives the pilot sufficient warning to correct the landing gear position in the event his landing gear is not fully extended when he throttles down for a landing. As an accessory to the warning device a wheel and flap position indicator shows the pilot the exact position of the landing gear and flaps when landing.

(Continued on Page 3)



LANDING GEAR

(Continued from Page 2)



B. STRUTS.

1. Description

The typical strut is a cylindrical hydraulic and pneumatic piston type shock absorber. It affords a controlled resistance to the shocks and loads imparted to the wheels of the aircraft during landing and taxiing.

Highly compressed air (approximately 500-3000 p.s.i.) and hydraulic fluid are used to absorb the main forces; when taxiing or at rest the weight of the airplane is carried mostly by the compressed air alone.

A spring has been used on some types of aircraft struts to replace the compressed air; the spring action is very similar to that of the air in carrying static and taxiing loads. The efficiency of the spring oil type strut is somewhat lower and its use is practically obsolete on combat aircraft where good landing characteristics are highly desirable.

For purposes of analysis a main landing gear strut may be divided into two major assemblies, namely, piston and cylinder. Many of the additional attachment parts embodied within these assemblies are optional and their insertion and position in the strut are determined by the critical factors of the airplane's structure. The conventional landing gear strut is usually a cantilever type (attached and braced at one support to the airplane structure).

(Continued on Page 4)





LANDING GEAR LANDING GEAR SECTION

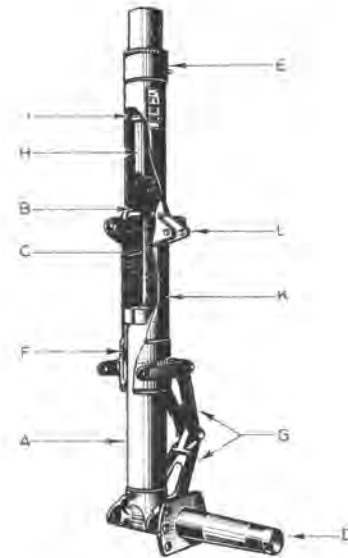
LANDING GEAR

(Continued from Page 3)

The cutaway strut at the right is Cleveland Pneumatic Company's Model XY450 and it is used on the C-60A and C-57D airplanes. It should be noted that these airplanes are the same in regard to weight and structure as they are both modifications of a commercial transport built by The Lockheed Aircraft Corporation. This strut has been chosen for illustrative purposes as it is an example of a typical air oil cantilever type and representative of the general design in use today on military aircraft.

To analyze the construction it is necessary to further divide the piston and cylinder assemblies mentioned above. The cylinder assembly "J" consists of two chambers divided by an orifice plate "B". A recoil valve "R" is located at the top of the piston tube "H", which is attached directly to the orifice plate. The filler plug "E" is located at the top of the upper chamber and the flanges welded into the cylinder structure just below the orifice plate level are the attachment members "I" for the landing gear retracting mechanism. Incorporated in the lower chamber of the cylinder is the packing gland "F" and directly attached to the outside of the cylinder at this point is the upper torque arm "G".

The piston assembly "A" telescopes inside the lower chamber of the cylinder with the top of the attached metering pin "C" level with the orifice plate. The lower torque arm is attached to the piston at its lowest extremity where the knuckle joint holds the spindle "D" in place. The fluid level is well above the orifice plate about 25% up into the compressed air chamber.



MAIN STRUT

2. Functions of Component Parts.

a. Piston

The piston is the sliding member which forces and communicates the various loads to the hydraulic fluid in the lower cylinder chamber.

b. Orifice Plate

The orifice plate is located between the two cylinder chambers and affords a fixed resistance to the passage of fluid from one chamber to another.

c. Metering Pin

The metering pin controls the size of the orifice aperture restricting it at points where greater resistance to the passage of fluid is required and enlarging it to reduce the pressure where necessary. The design of the metering pin is peculiar and the taper varies with the actual pressure characteristics encountered in tests.

d. Spindle or Axle

The spindle provides the bearing surface upon which the wheel rotates. It should be noted that this unit is not always supplied with the strut as it is an option of the aircraft manufacturer.

e. Filler Plug

The core of the filler plug is an air valve which is used to control the pressurizing and discharging of air to and from the upper chamber. The filler plug, as the name implies, is also used for filling the strut with hydraulic fluid when it is decompressed. This is accomplished by first deflating the strut with the air valve and then removing the whole filler plug assembly from the strut wall.

(Continued on Page 5)



LANDING GEAR

(Continued from Page 4)

f. Packing Gland

The packing gland consists of moulded packing rings designed to seal the sliding joint of the piston and cylinder and thereby prevent the leakage of hydraulic fluid from the lower chamber.

g. Torque Arm or Torque Scissors

The majority of struts are equipped with torque arms attached to the cylinder and piston to maintain correct alignment of the wheels.

h. Piston Tube

The piston tube forms an inner cylinder inside the upper chamber; perforations around the bottom of this tube permit passage of the hydraulic fluid when filling the strut and thereby eliminate air traps. These same perforations supply a resistance to compression and extension of the strut.

i. Recoil Valve

The recoil valve at the top of the piston tube provides a means of controlling the extension of the strut, by metering the compressed air back into the piston tube after compression, however, this valve does not offer a resistance to the passage of air going the other way during the compression stroke. The use of the recoil valve improves the landing characteristics of the strut and tends to eliminate bouncing or hopping.

For reasons of balance it is necessary to have a third wheel on an airplane; this wheel can either be placed at the nose or tail. The auxiliary wheel also requires a strut as it is affected by similar loads as is the main landing gear, however, these loads usually have a lesser magnitude and this wheel does not require as sturdy a supporting structure as the main wheels.

The basic components of the auxiliary strut are almost identical to the main landing gear. For identification of letters on the drawing at the right see Section 2—Functions of Component Parts. This strut is The Glenn L. Martin Company's model number 167 which is typical of the general design on tail wheel struts.

j. Shimmy Device

All nose and tail wheel strut assemblies are supplied with a shimmy device whose purpose is the dampening of oblique movements due to the castered wheel oscillation at a relatively high speed.

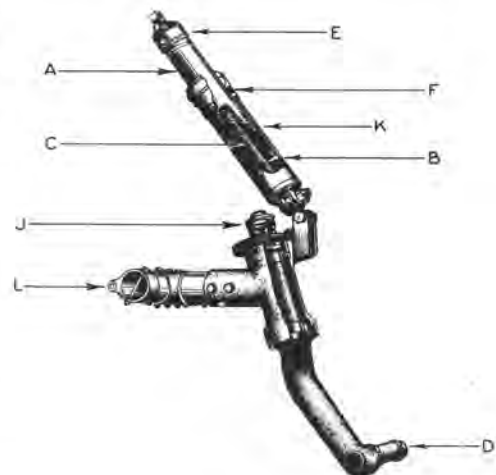
The shimmy device consists of a hydraulic mechanism which offers a resistance to the oscillating movement and dampens it sufficiently to overcome excessive vibration. On some tail wheel planes the use of two friction discs held in place by a spring has been used in lieu of the hydraulic type mentioned above.

C. WHEELS AND BRAKES.

The wheel is the conventional method of translating the lateral force of the airplane to the ground and the friction of the rotating wheel on the spindle or axle, slows the airplane in landing enough to permit the application of brakes. The wheel size is dependent to a large extent on the size of the aircraft and its weight. Magnesium alloy, which is light and very strong, is a basic component of the wheel structure.

The tactical use of the airplane sometimes warrants the installation of floats or skis, instead of the wheel; on some amphibious planes both wheels and floats are installed. As both wheels and brakes are covered in detail in the succeeding section of this Index a complete description on these subjects can be read by referring to page 58 for wheels, and page 9 for brakes.

(Continued on Page 6)



AUXILIARY STRUT



LANDING GEAR

(Continued from Page 5)

D. CASINGS AND TUBES.

The casing or tire which is installed on the airplane wheel forms the immediate contact of the airplane to the ground. It functions with the assistance of the inflated tube to absorb part of the shocks and loads imposed upon the landing gear. Airplane tires and tubes are always subjected to a severe strain on landing; under normal conditions, however, with proper maintenance of the tires they withstand a great number of these landings without damage. When tire damage is caused at the time of landing it is usually caused by poor judgment or unforeseen circumstances. Experienced pilots, however, can make landings that will help save the tires, resulting in longer tread wear and at the same time eliminate much of the excessive strain on the side walls of the tires at the moment of impact.

Landing with locked brakes results in extremely severe wear on one spot on the tire, which causes a "flat spot", necessitating the tire's removal for treading or replacement. It also causes very severe heat at that point in the tire, often melting the tread rubber and placing a strain on the beads and cord body.

It is commonly believed that much of the damaging effect to tires caused by landings could be eliminated if the landing wheels were pre-rotated so that they approached or reached the speed of the plane as the tire contacted the ground. However, actual tests have proved that an airplane tire does not usually wear out on the crown but is generally replaced due to weakness in its side walls.

E. STEERING SYSTEM.

1. Tail Wheel Planes

All tail wheel assemblies on military aircraft are equipped with a swiveling device to allow rotation of the tail wheel through 360°. If the tail wheel is retractable it will have a centering device to insure proper alignment during retraction and extension.

On some types of tail wheel planes the pilot has no direct control of the steering of the tail wheel and can only guide the plane by brake applications.

There are several benefits to the use of the tail wheel steering control, namely:

- a. It enables the pilot to keep the airplane headed in a fixed direction without the use of brakes, while taxiing, and during the run after landing.
- b. It also eliminates to a certain extent the use of towing tractors; and considerably aids the ground crew in the handling and moving of planes on the line or in the hangar. The steering mechanism is releasable at the pilot's discretion as it is not always advantageous to move the wheel when moving the rudder.

The tail wheel steering mechanism consists of two cables attached to the tail wheel post flange and the rudder pedals. It is not desirable to link these cables to the rudder cables as this may be dangerous if any part of the steering device becomes fouled in taking off. A spring is spliced into each of the steering cables to eliminate the transmission to the pilot of shocks caused by irregular places, bumps, etc., in the runway.

On multi-engined tail wheel airplanes the pilot is able to lock the tail wheel post in the neutral position. This locking device is operable by either the pilot or co-pilot.

2. Nose Wheel Planes

Although most nose wheel planes are steerable only through brake applications, provisions for a separate nose wheel steering method on single and multi-engine airplanes are highly desirable for ground handling and low speed taxiing. The steering mechanism may be released and engaged at will by the pilot with any position of the nose wheel and it is automatically released on take-off so as to be disengaged at the time of landing. It is operable throughout a range which will permit turns to be made about one wheel as a pivot.

The nose wheel steering assembly is either electric or hydraulic; the hydraulic system usually consists of two servo pistons connected to the nose wheel post flange. The servo valves are controlled

(Continued on Page 7)



LANDING GEAR

(Continued from Page 6)

by the pilot through independent means. The electric power driven steering mechanism consists of an electric motor suitably linked and geared to move the nose wheel acting at the nose fork or equivalent.

INSTALLATION:

The installation of the landing gear assembly is varied with the design of the aircraft and it is dependent upon several of the geometrical peculiarities of each installation. The following discourse represents a sequence of installation specifications that are applicable to most military aircraft.

A. Wheel Tread.

It is desirable to space the main landing wheels wide enough apart so that the tread breadth allows for easy steering by brake application. This also allows a wider distribution of the airplane's gross weight which permits a better stability for ground movements.

B. Wing Lift.

The landing gear supports the plane so that the maximum wing lift coefficient is achieved on the take-off. This qualification of the installation assures that the plane will leave the ground in the shortest possible time with the greatest amount of control for normal conditions. It also permits the plane to return to the ground in the most controllable manner.

C. Wheel Relationship to the Ground.

It is desirable to have the main wheels rotate about an axis that is as nearly parallel to the ground surface as possible and perpendicular to the longitudinal axis of the plane. When the wheel axis is inclined toward the ground it causes a strain of the side wall of the tire and necessitates casing replacement sooner than if the wheel axis were parallel to the ground.

D. Center of Gravity.

The center of gravity is the most determining factor in the location of the landing gear. On nose wheel planes the main landing gear is located rearward of this theoretical point so that the airplane will fall forward on its nose wheel and the plane will not make a too exaggerated tail down landing. Similarly on tail wheel planes the main landing gear is placed forward of the center of gravity so that the plane will not nose forward in landing.

It also should be noted in connection with tail wheel airplanes that the rear wheel support is inclined so as to improve trailing characteristics of the assembly and tend to dampen oblique oscillations.

E. Emergency Landing Provisions.

The lower portion of the airplane is usually so formed and constructed that in the event of a landing with wheels retracted the possibility of injury to the primary structure, fuel system and personnel will be minimized. The skin of the cowling likely to bear on the ground is relatively heavy gage material and provides for the protection of the engine. On all nose wheel type planes, a tail skid or buffer is provided which adequately protects the control surfaces of the rear portion of the structure from damage in the event of a tail down landing.

CYCLE OF OPERATION:

A. Take-off.

Assuming the aircraft is starting down the runway gaining speed for the take-off, it gathers speed and the wings develop more and more lift; the wheels of the plane are rotating very rapidly. On a rolling field the landing gear functions to compress on the hills and extend in the valleys so as to absorb the forces imparted to the airplane structure by these irregularities and thereby keep the attitude of the plane in the desired take-off position.

(Continued on Page 8)



LANDING GEAR LANDING GEAR SECTION

LANDING GEAR

(Continued from Page 7)

No sooner do the wheels leave the ground and the airplane starts to climb when the pilot pulls the control handle of the retracting mechanism into the up position where it locks. By moving the landing gear control handle up the pilot changes the setting of a direction control valve in the hydraulic system. With the change of the valve direction, fluid is released to flow to the bottom part of the retracting cylinders. As the pressure of the fluid builds up in these chambers it displaces fluid on the side of the servo pistons which in turn force upward pulling the landing gear with them. As the landing gear reaches the top of its travel it locks in place by mechanical action.

B. Landing.

When the plane comes in to a landing, the pilot releases the landing gear lock and pushes the handle down to lower the gear, and the hydraulic system functions in reverse of the above. If the gear is not fully extended before he throttles below $\frac{1}{4}$ full throttle the warning signal notifies him of the danger.

As the plane settles to the ground the wheels will touch simultaneously if it is a good landing. The tire and tube will deflect vertically and laterally to absorb the shock. The strut starts to compress with the piston forcing fluid through the orifice plate into the upper chamber. After the compression reaches its maximum the landing gear starts to extend itself as soon as the force of the compressed air equals the impact force. The extension is forced by the highly compressed air in the upper strut chamber and it is controlled by the recoil valve which meters the air back into the piston tube.

After the plane has rolled several hundred yards it slows sufficiently to apply the brakes. The slowing is due to the friction between the wheel and the axle, the tire rotating on the ground, and the resistance of the air to the movement of the airplane.

To apply the brakes the pilot pushes down with both feet on the control pedals, thus metering hydraulic fluid into the brake lines. The pressure the brakes exert in stopping the plane is directly proportional to the foot pressure on the control pedals. By relieving the pressure on the pedals the braking force is cut down.

For specific details on the aircraft hydraulic system refer to page 65 of Volume 1, first revision, 1 March 1944, Index of Army-Navy Aeronautical Equipment.

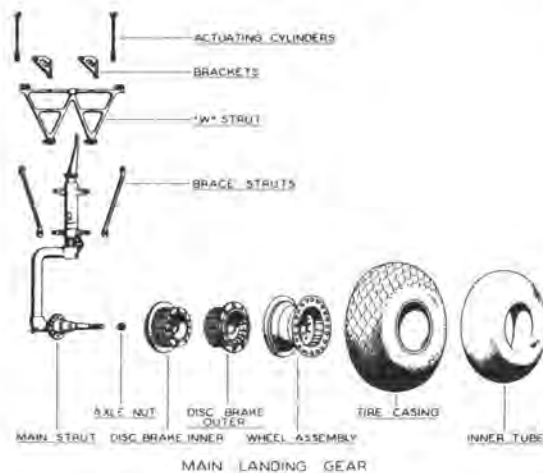
INTERCHANGEABILITY:

It is readily seen from the description and specifications listed under the installation section that for all practical purposes there is no interchangeability between complete landing gear assemblies.

Considering the various components separately that fit together to complete the landing gear assembly, practically the only interchangeable items are the casings and tubes. A few wheels and brake assemblies are interchangeable but this is only true in a limited number of cases where comparable loading conditions exist.

The main attempts on standardization of the landing gear have been directed to the specifying of standard procedure in drop testing and in the design location of the assembly on the aircraft.

Reference to Air Force Specification 40228 and 40638 should be made for standard drop test procedure and other specific data referring to landing gear.





AIRPLANE WHEEL BRAKES

PURPOSE:

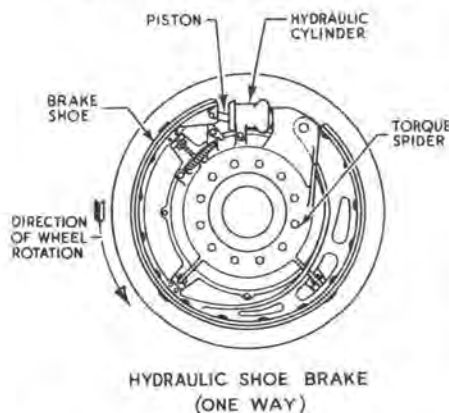
The main purpose of airplane wheel brakes is to decelerate the airplane's speed upon landing. However, they are also used to help guide the plane while taxiing by braking the wheel on the right or left side, the degree of turning depending upon the pressure applied; to hold the airplane in a parked position while warming up or testing the engines and when the airplane is mooring, and to hold the airplane till the engines are "revved up" for take-off on shorter than required length of runway. Power necessary to operate the brakes may be supplied by mechanical means or by hydraulic pressure.

DESCRIPTION:

Hydraulically-operated wheel brakes are of three basic types; the internally expanding shoe, the expander tube and the disc (single or multiple). In the first two, braking action is obtained by the friction of the brake lining against a brake drum. The single disc type is, as its name implies, a single steel disc, rotating between cylindrical brake shoes held in a U-clamp. The multiple disc type has a series of rotating and stationary discs, which are pressed together to cause braking action. Brakes are usually installed on the inboard side of the main landing wheels. Brakes on both sides of a wheel are known as dual brakes.

INSTALLATION AND OPERATION:

In the internally expanding shoe brake the main structural unit is the torque spider, a disc-like metal part on which the shoe or shoes are mounted. The spider fits over and is bolted to the torque flange of the axle. There may be one or two shoes, each having brake lining riveted to it. A hydraulic cylinder with one or two pistons is mounted on the torque spider, providing the force by which the shoe is pressed against the brake drum.

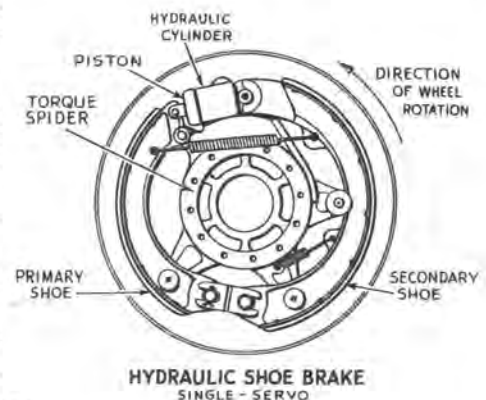


Where only one shoe is employed with a single piston in the hydraulic cylinder, the brake is known as one-way. One end of the shoe is bolted to the torque spider at the rear of the cylinder and the other end to the piston. At several other points the disc is attached to the spider by bolts through slots in the shoe which allow the play necessary to accommodate the braking action.

Two shoes are employed in the single-servo brake. The shorter shoe is known as the primary and the other as the secondary. One end of the primary shoe is attached to the hydraulic piston and the other is hinged to the secondary shoe, which in turn is fastened to the torque spider. Both shoes are fastened to the spider by means of bolts through slots in the shoes, providing a full-floating shoe ring. In operation, pressure is applied to the brake

pedal in the cockpit and transmitted through the hydraulic system to the piston, which forces the primary shoe against the brake drum. The resulting friction causes the primary shoe to move in an arc, forcing it against the secondary shoe and bringing the latter against the brake drum. Thus, the secondary shoe is actuated more by friction than by direct hydraulic action and its braking force is more effective for one direction of wheel rotation, than the other. That is, if the braking is adequate for the forward motion of the wheel, it would not necessarily be adequate for backward motion.

When the two shoes are equal in size and an individual piston is attached to each shoe, the brake is known as a duo-servo. The braking action is the same as above, one shoe acting as primary and the other as secondary, according to

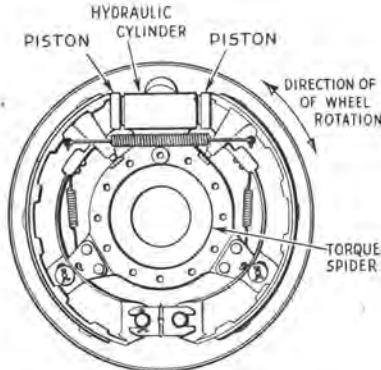


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AIRPLANE WHEEL BRAKES

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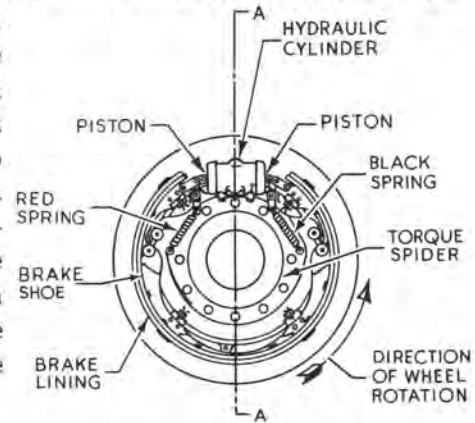


HYDRAULIC SHOE BRAKE
DUO-SERVO

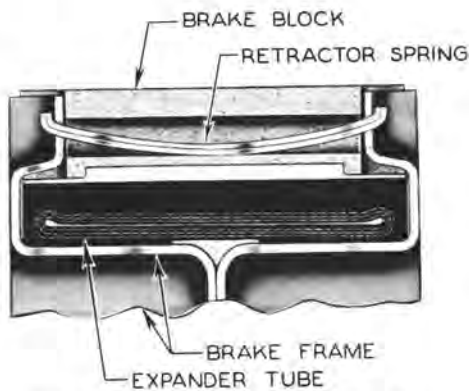
the direction of wheel rotation. The actuating force for the secondary shoe comes from the primary shoe and not from the piston to which it is attached, since the piston is forced back into the cylinder by the reverse movement applied to the secondary shoe by its contact with the brake drum. The braking action is the same for either direction of motion of the wheel. One brake of this type, called reversible, uses a single shoe that extends around the torque spider from one piston to the other.

expander tube itself is a flat rubber tube which is filled with hydraulic (brake) fluid and fits into the outer portion of the brake frames. Brake frames may be either the cast type with stamped steel rims bolted to the outer periphery of the cast frame, or the stamped steel type which consists of two stamped steel frames bolted together. Both types include a housing in the outer rim to retain the expander tube, retractor spring and brake blocks. The brake blocks are made of a composite material and have a special brake lining on the friction surface and a backing of stronger material to give them the necessary strength to resist the thrust against the torque lugs and retractor spring.

The expander tube brake consists of three main parts: the brake frames, expander tube and brake blocks, and is manufactured in single and duplex types. The single type has one row of brake blocks and the duplex has two rows. The

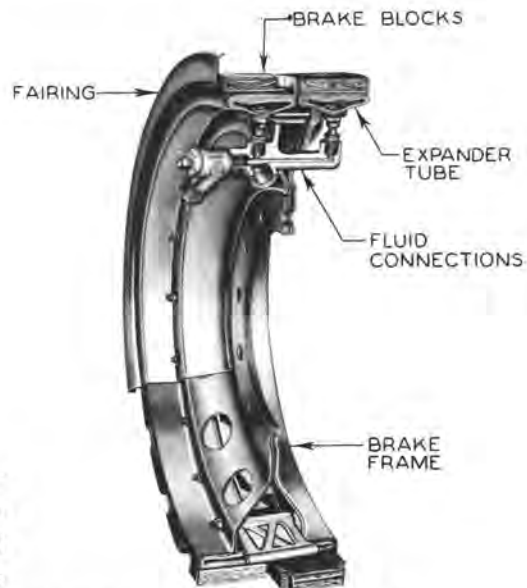


HYDRAULIC SHOE BRAKE
2 WAY-REVERSIBLE



BRAKE BLOCK MOUNTING

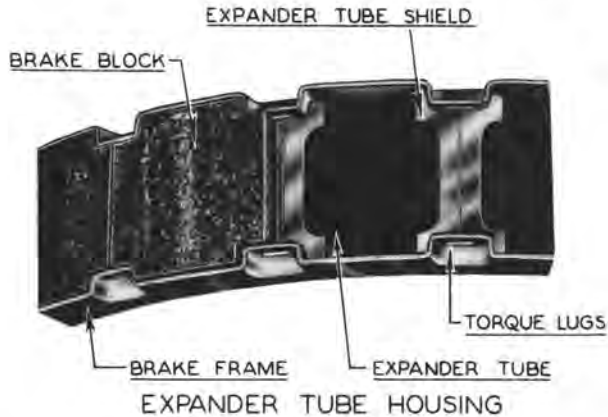
The retractor spring consists of a single or double leaf spring, each end of which is anchored in a hole in each torque lug. Expander tube shields are used under the ends of the brake blocks to prevent the expander tube from being forced in between the blocks.



DUPLEX EXPANDER TUBE BRAKE

(Continued on Page 11)

AIRPLANE WHEEL BRAKES

(Continued from Page 10)

When the brake pedal is applied the hydraulic fluid pressure in the expander tube increases and forces the brake blocks against the brake drum. At this point the torque lugs prevent the blocks from slipping around the frame. When the pressure is released the tube collapses and the retractor spring forces the brake blocks to return to their normal position.

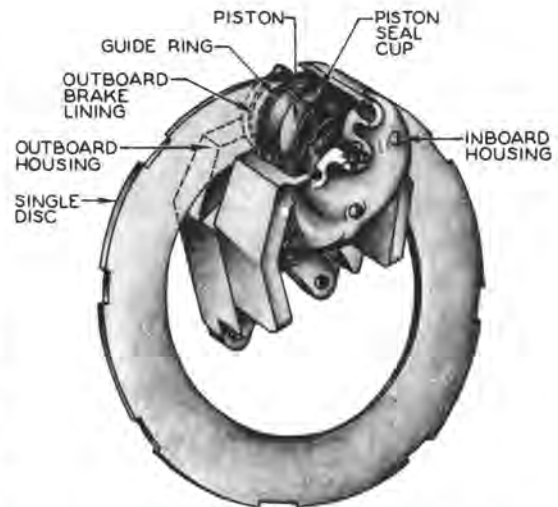
There are two types of single disc brakes: floating disc and fixed disc. In the floating type, the annular

disc floats on the wheel drive keys. This floating action compensates for the fact that when braking pressure is applied, only the inboard brake lining moves toward the disc, the outboard remaining stationary. As the inboard lining presses it, the floating disc moves away till it contacts the outboard lining. Thus, the disc receives equal clamping action on both sides as the pressure is increased. Floating disc type brakes are rigidly attached to the axle torque plate of the airplane.

In the fixed type the annular disc is rigidly attached to the wheel casting and is supplied as an integral part of the wheel assembly. Brakes of this type are bolted to the axle torque plate through bushings which allow a slight lateral movement of the brake. Because of this movement when the inboard brake lining presses against the disc, the brake unit moves sufficiently to bring the outboard lining against the other side of the disc with equal pressure.

The single disc brake is manufactured in both hydraulic and mechanical types. The braking disc is installed flush with the wheel rim and is exposed to the full cooling effect of the slip stream. This, together with its large surface area, insures rapid heat dissipation.

In the multiple disc type brake, metal discs are alternately keyed to the anchor bracket and to the wheel. The bracket is bolted to the torque flange of the axle. The discs which are keyed to the wheel rotate with it and are made of bronze, while the discs that are stationary are keyed to the brake anchor and are made of steel. A piston actuated by hydraulic fluid is located at one side of the discs. When pressure is applied to the brake, the piston forces the discs together, causing the braking action. These discs are relatively thin and may be as many as fifty in number. Another type disc brake rarely has more than five discs. These are thicker than those described above and the stationary discs have brake lining on their faces.



HYDRAULIC SINGLE DISC BRAKE

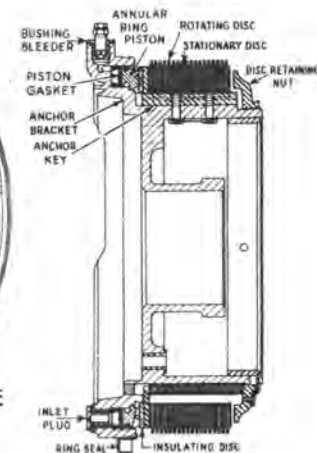
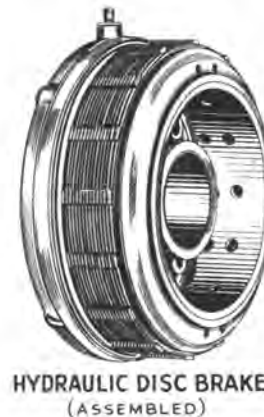
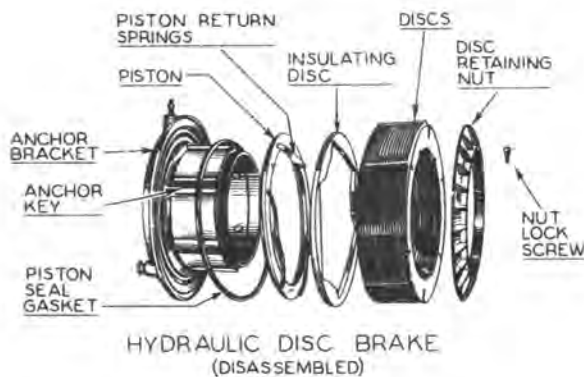
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BRAKES LANDING GEAR SECTION

AIRPLANE WHEEL BRAKES

(Continued from Page 11)



DIMENSIONING:

Shoe and expander tube brakes are dimensioned by the outside diameter and the width of the brake lining, that is, a brake marked 11 inches x 2 inches indicates that it is 11 inches in diameter (which is also the diameter of the brake drum into which it fits) and that the brake shoe is 2 inches wide.

Dimensioning of hydraulic single disc brakes is accomplished by a fraction, the numerator of which shows the important dimensions of the disc, and the denominator of which shows data relative to the brake cylinder. The numerator lists in order the outside diameter of the disc, the width of the disc face and the thickness of the disc; the denominator lists the number of braking cylinders followed by a dash and the diameter of the cylinders and lastly the area of the braking surface. For example, the brake entitled: "Brake Assy.— $\frac{10.5 \times 2.0 \times .312}{2-2.5 \times 22}$ Hydraulic" means a hydraulic single disc brake

with a disc 10.5" in diameter, 2.0" face width and .312" thick and containing two braking cylinders, 2.5" in diameter with a total braking surface of 22 square inches. In dimensioning of mechanical single disc brakes the numerator of the fraction remains the same, whereas the denominator represents the square inches of brake lining surface.

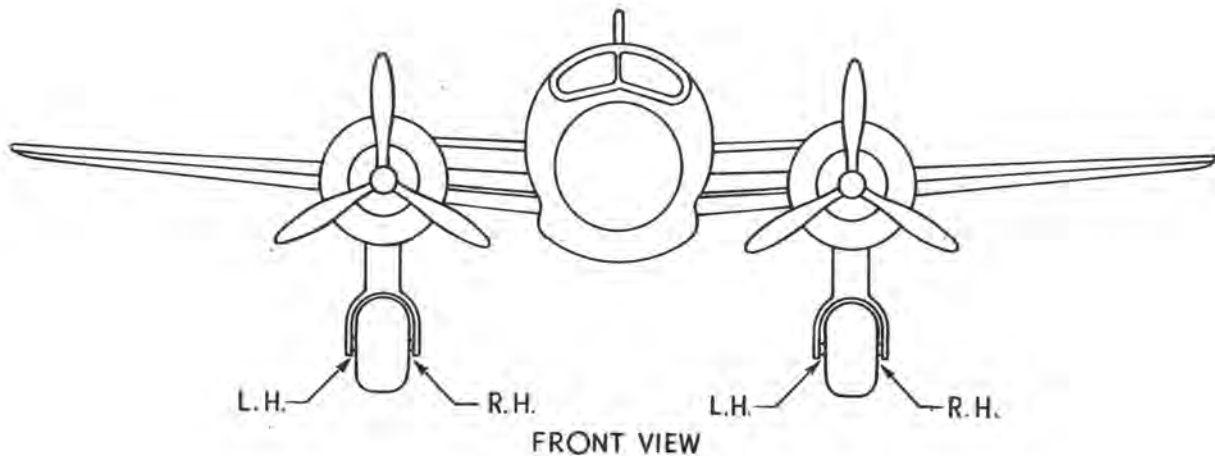
There are four dimensions for the multiple-disc brakes. The first is the outside diameter of the discs; the second (or numerator of the fraction) is the thickness of one rotating disc; the third (or denominator of the fraction) is the thickness of one stationary disc; and the fourth indicates the number of pairs of discs. For example, a brake marked 7.6 x .080/.070 x 11, is 7.6 inches in diameter, has rotating discs .080 inch thick, stationary discs .070 inch thick and has 11 pairs of discs. The decimal point is often omitted from the disc thickness dimension and the nomenclature may read: 7.6 x 080/070 x 11; or the thicknesses may be omitted entirely; such as 7.6 x 11. Sometimes the letter H or W appears after the first dimension; H means that the discs are heavier than usual, and W that the braking surface of the disc is wider than usual. The clearance between the stack of discs is .007 times the number of discs. For example, a brake with 9 sets of discs has a clearance of .007 times 9, or .063 inches between the stack of discs and the retaining nut.

(Continued on Page 13)



AIRPLANE WHEEL BRAKES

(Continued from Page 12)



INTERCHANGEABILITY:

Brakes are often designated right hand or left hand. These designations must be considered when installing the single-servo and one-way shoe brakes. The duo-servo and reversible brakes may be used either right or left, but on reversible brakes the red retracting spring must always be forward. This will necessitate removing both springs and exchanging position when changing a brake from right to left. The expander tube brakes are interchangeable, although the larger sizes are sometimes designated inner and outer. These may be interchanged by altering the arrangement of parts.

Formerly all brakes were equipped with fairings. Recently, however, these have been removed from expander tube brakes. This is indicated by a "1" following the drawing or part number.

The brakes in the following sections are listed as assemblies, indicating that they come with all parts assembled. These parts are shown in the accompanying illustrations.

When drawing or part number is followed by the letter A or M, it indicates that the brake is made from aluminum or magnesium alloy, respectively. This practice is not always closely followed by the brake manufacturers and therefore if such a letter is lacking it does not necessarily mean that the brake is made from some other alloy.



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—6.7 x .080/.070 x 10

GOODYEAR 731799

NAMES: Brake—6.7 x .080/.070 x 10 aircraft landing wheel
 Multiple disc brake, 6.7 x 10
 Brake, hydraulic—6.7 x .080/.070 x 10
 Hydraulic brake—6.7 x .080/.070 x 10
 Landing wheel brake—6.7 x .080/.070 x 10

DESCRIPTION:
 This is a multiple disc brake.

CHARACTERISTICS:
 Brake disc outside diameter..... 6.7 inches
 Rotating disc thickness......080 inch
 Stationary disc thickness......070 inch
 Number of pairs of discs..... 10
 Weight..... approximately 16 pounds

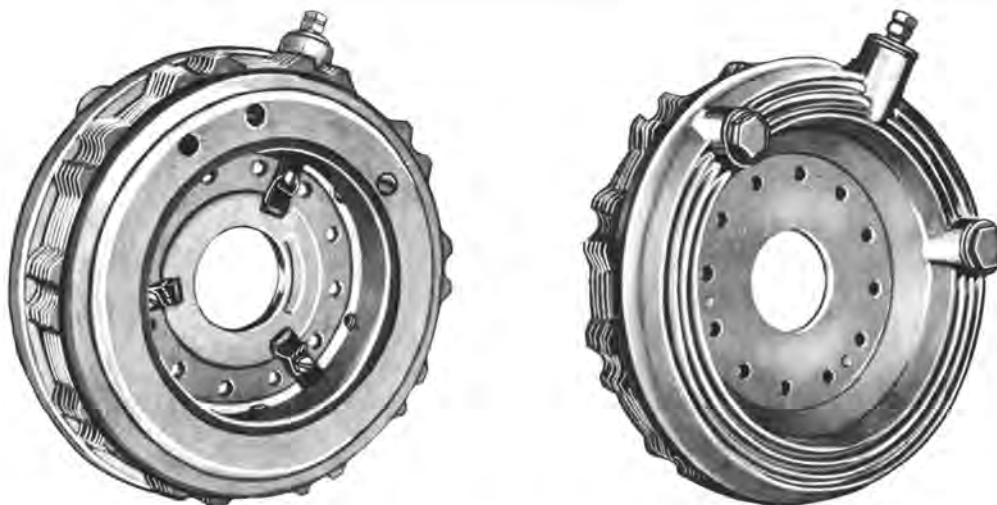
RELATIONSHIP OF PARTS: Used with:
 Wheel assembly..... 5" (Airwheel) manufacturer's part number
 731802

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)
 SPECIFICATIONS:
 General..... AN-W-6
 MANUFACTURER'S PART NUMBER: Goodyear Tire and Rubber Co. 731799M
 A. S. C. STOCK NUMBER: 4109 731799M
 TECHNICAL ORDER NUMBER: 03-25D-2
 PRODUCTION STATUS: Under procurement as contractor furnished equipment.
 SHIPPING DATA: Shipped as a complete assembly.
 ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6
 F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number
 PROCUREMENT STATUS: Under procurement.



BRAKE ASSEMBLY—7.6 x .080/.070 x 6

GOODYEAR 218262

NAMES: Multiple disc brake, 7.6 x 6	Hydraulic brake—7.6 x .080/.070 x 6
Brake—7.6 x .080/.070 x 6 aircraft landing wheel	Landing wheel brake—7.6 x .080/.070 x 6
Brake, hydraulic—7.6 x .080/.070 x 6	

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter	7.6 inches
Rotating disc thickness080 inch
Stationary disc thickness070 inch
Number of pairs of discs	6
Weight	approximately 9.25 pounds (magnesium) approximately 10.2 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly	7.50-10 low pressure landing, manufacturer's part number 218264
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ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

 General AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 218262M (magnesium anchor bracket); 218262A (aluminum anchor bracket)

A. S. C. STOCK NUMBER: 4109 218262M and 4109 218262A

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



**BRAKE ASSEMBLY—7.6 x .100/.125 x 9 HIGH PRESSURE
GOODYEAR 511124**

NAMES: High pressure brake assembly—
7.6 x .100/.125 x 9
Brake assembly—7.6 x 9 (British)

Brake, hydraulic—7.6 x .100/.125 x 9
Landing wheel brake—7.6 x 100/125 x 9 high
pressure

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter 7.6 inches
- Rotating disc thickness 0.100 inch
- Stationary disc thickness 0.125 inch
- Number of pairs of discs 9
- Weight approximately 17¼ lbs. (magnesium)
18⅓ lbs. (aluminum)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—27 smooth contour landing,
manufacturer's part number 530441 A. E. Reference Number 41-5900

ARMY

A. E. REFERENCE NUMBER: 41-5901

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co. 511124M and 511124A

A. S. C. STOCK NUMBER: 4109 511124M and 4109 511124A; former A. S. C. Number 4100098274

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/880



BRAKE ASSEMBLY—7.6 x .080/.070 x 11

GOODYEAR 530177

NAMES: Low pressure brake assembly—
7.6 x .080/.070 x 11
Brake—7.6 x 080/070 x 11 aircraft landing wheel

Brake assembly—7.6 x 11 (British)
Brake assembly—27-inch smooth contour wheel

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter.....7.6 inches
Rotating disc thickness.....0.080 inch
Stationary disc thickness.....0.070 inch
Number of pairs of discs.....11
Weight.....approximately 14½ lbs.

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—27 smooth contour landing,
manufacturer's part number 530101.....A. E. Reference Number 41-5800

ARMY

A. E. REFERENCE NUMBER: 41-5801

SPECIFICATIONS:

General.....AN-W-6
Superseded.....25268

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 530177-MI

A. S. C. STOCK NUMBER: 4109 530177MI; former A. S. C. Number 4100099200

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/894



**BRAKE ASSEMBLY—8.00 x 1.25 x .125 MECHANICAL
2.45**

GOODYEAR 511254

NAMES: Single disc—mechanical brake assembly— $\frac{8.0 \times 1.25 \times .125}{2.45}$

Brake— $\frac{1.25 \times .125}{2.45}$ aircraft landing wheel

Landing wheel brake— $8.00 \times 1.25 \times .125/2.45$
Mechanical brake—8-inch disc

DESCRIPTION: This is a single disc mechanical brake.

CHARACTERISTICS:

- Brake disc installation floating type
- Brake disc—outside diameter 8.00 inches
- Brake disc face width 1.25 inches
- Brake disc thickness125 inch
- Area of brake lining 2.45 sq. inches
- Weight approximately 2.7 pounds

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly 6.00-6 low pressure landing,
manufacturer's part number 511413 A. E. Reference Number 41-5100
- Wheel assembly 6.00-6 low pressure landing,
manufacturer's part number 511135

ARMY

A. E. REFERENCE NUMBER: 41-5103

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 511254M

A. S. C. STOCK NUMBER: 4109 511254M

TECHNICAL ORDER NUMBER: 03-25D-5

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/901



**BRAKE ASSEMBLY—8.0 x 1.5 x .125 HYDRAULIC
1-2.0 x 3.54**

GOODYEAR 511572

NAMES: Single disc brake, hydraulic, 8.0 x 1.5 x .125/1-2.0 x 3.54
Brake—1.5 x .125/1-2.0 x 3.54 aircraft landing wheel
Hydraulic brake—8.0 x 1.5 x .125/1-2.0 x 3.54

DESCRIPTION: This is a single disc hydraulic brake, with one pair of brake linings and one operating cylinder.

CHARACTERISTICS:

- Brake disc installation.....floating type
- Brake disc outside diameter.....8 inches
- Brake disc face width.....1.5 inches
- Brake disc thickness......125 inch
- Number of cylinders.....1
- Diameter of brake cylinders.....2 inches
- Area of brake lining.....3.54 sq. inches
- Weight.....approximately 2.64 pounds (magnesium)
approximately 3.22 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—6.00-6 low pressure landing,
manufacturer's part numbers-511413 or 511135. A. E. Reference Number 41-5100

ARMY

A. E. REFERENCE NUMBER: 41-5102

SPECIFICATIONS:

General.....AN-W-6

PRODUCTION STATUS: Under procurement. Brake 511572 supersedes 511283.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

**ALL MODELS BELOW ARE INTERCHANGEABLE
Models Are Used In Services As Noted In Column 4
A—Army N—Navy B—British C—Commercial**

Manufacturer	Manufacturer's Part Number	Used By	Air Service Command Stock No.	Army Technical Order Number	Remarks
Goodyear Tire & Rubber Co.	511572M	A-N	4109 511572M	03-25D-5	Magnesium anchor bracket.
	511572A	A-N	4109 511572A	03-25D-5	Aluminum anchor bracket.
	511283	A-N	4109 511283	03-25D-5	Limited procurement. Superseded by and interchangeable with 511572.



BRAKE ASSEMBLY—10.0 x .100/.125 x 5
GOODYEAR 510548

NAMES: Low pressure brake assembly—10.0 x .100/.125 x 5 Brake assembly—10.00 x 5 (British)
Brake—10.0 x 100/125 x 5 aircraft landing wheel Brake—10.0 x 5 low pressure wheel

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter 10.0 inches
- Rotating disc thickness 0.100 inch
- Stationary disc thickness 0.125 inch
- Number of pairs of discs 5
- Weight approximately 19.4 pounds (magnesium)
21.0 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—26 x 6 high pressure landing,
manufacturer's part number 530094 A. E. Reference Number 41-5450

ARMY

A. E. REFERENCE NUMBER: 41-5451

SPECIFICATIONS:

- General AN-W-6
- Superseded 25268

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co. 510548M and 510548A.

A. S. C. STOCK NUMBER: 4109 510548; former A. S. C. Number 4100044800.

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/838



**BRAKE ASSEMBLY—12.7 x .155/.125 x 5 HIGH PRESSURE
GOODYEAR 510967**

NAMES: High pressure brake assembly—12.7 x .155/.125 x 5
Brake—12.7 x 155/125 x 5 aircraft landing wheel
Multiple disc brake—12.7 x 5 H.P.
Hydraulic brake—12.7 x .155/.125 x 5
Landing wheel brake—12.7 x .155/.125 x 5 high pressure

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter.....12.7 inches
Rotating disc thickness......155 inch
Stationary disc thickness......125 inch
Number of pairs of discs.....5
Weight.....approximately 45.3 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—15.00-16 low pressure, manufacturer's part number 530161.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General.....AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 510967-2MI

A. S. C. STOCK NUMBER: 4109 510967-2MI

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



**BRAKE ASSEMBLY—12.7 x .100/.125 x 7 HIGH PRESSURE
GOODYEAR 510944**

NAMES: High pressure brake assembly—12.7 x .100/.125 x 7
Brake—12.7 x 100/125 x 7 aircraft landing wheel
Multiple disc brake—12.7 x 7 H.P.
Hydraulic brake—12.7 x .100/.125 x 7
Landing wheel brake—12.7 x .100/.125 x 7 high pressure

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter.....12.7 inches
Rotating disc thickness......100 inch
Stationary disc thickness......125 inch
Number of pairs of discs......7
Weight.....approximately 30 pounds (magnesium)
34 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—34 x 9 high pressure landing,
manufacturer's part number 530244.....A. E. Reference Number 41-6550

ARMY

A. E. REFERENCE NUMBER: 41-6551

SPECIFICATIONS:

General.....AN-W-6

MANUFACTURERS PART NUMBER: Goodyear Tire & Rubber Co. 510944M (magnesium anchor bracket); 510944A (aluminum anchor bracket)

A. S. C. STOCK NUMBER: 4109 510944M and 4109 510944A

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

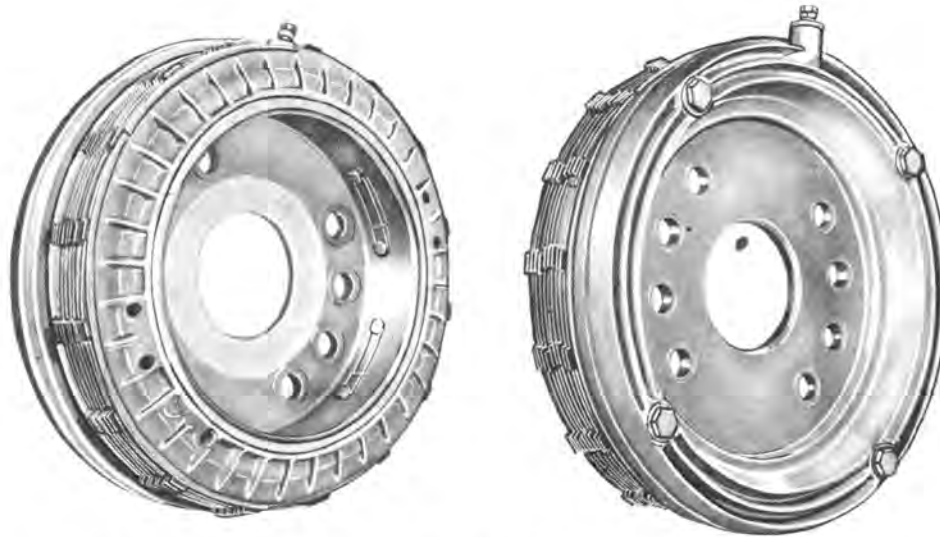
SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

INTERCHANGEABILITY NOTE: Brake number 510623 and 510944 may both be mounted on the same wheel and axle assembly, but 510623 must be operated on a low pressure hydraulic system, whereas 510944 is a high pressure brake.



**BRAKE ASSEMBLY—12.7 x .080/.070 x 9
GOODYEAR 510021**

NAMES: Brake—12.7 x 080/070 x 9 aircraft landing wheel Hydraulic brake—12.7 x .080/.070 x 9
Multiple disc brake—12.7 x 9 Landing wheel brake—12.7 x .080/.070 x 9

DESCRIPTION: This is a multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter..... 12.7 inches
Rotating disc thickness..... .080 inch
Stationary disc thickness..... .070 inch
Number of pairs of discs..... 9
Weight..... approximately 28.25 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—15.00-16 low pressure landing, manufacturer's part number 530161.

ARMY

A. E. REFERENCE NUMBER: None (C. F. E.)

SPECIFICATIONS:

General..... AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 510021M

A. S. C. STOCK NUMBER: 4109 510021M

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—12.7 x .100/.125 x 9

GOODYEAR 510594—511656

NAMES: Low pressure brake assembly—12.7 x .100/.125 x 9 Hydraulic brake—12.7 x 100/125 x 9
Brake—12.7 x 9 aircraft landing wheel Landing wheel brake—12.7 x .100/.125 L.P.

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter.....12.7 inches
- Rotating disc thickness......100 inch
- Stationary disc thickness......125 inch
- Number of pairs of discs.....9
- Weight.....approximately 38 pounds (magnesium)
42 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—36 smooth contour landing,
manufacturer's part number 731029.....A. E. Reference Number 41-6800

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:

- General.....AN-W-6
- Superseded.....25268

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

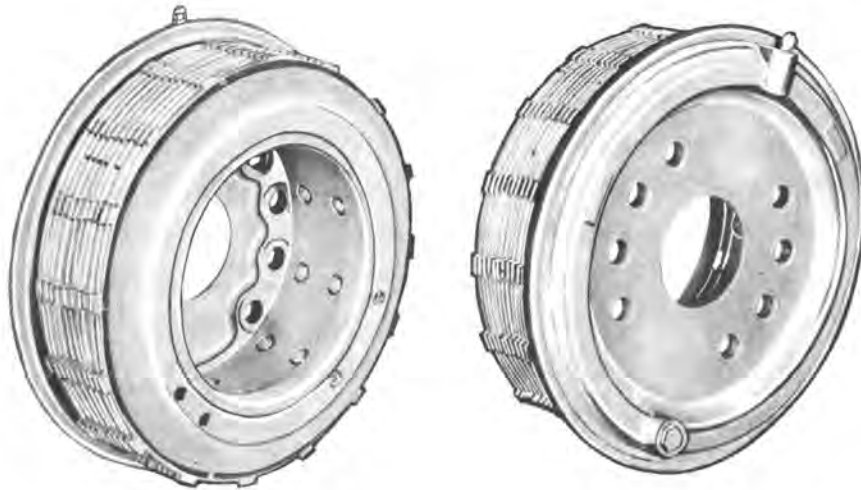
ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British, C—Commercial

Manufacturer	Manu- facturer's Model Identi- fication	Manu- facturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	Former Air Service Command Stock Number	British Reference Number	Aerno Number	Remarks
Goodyear Tire & Rubber Co.	511656	511656	A	4109 511656				41-6803	Not winterized; uses A.C. 3580 hydraulic fluid. Supersedes and interchangeable with 731032.
	510594M	510594	A-B	4109 510594M	03-25D-2	4100065560	127A/840	31-6801	Winterized; uses AN-VV-0-366 fluid.
	731032M	731032	A-B	4109 731032M	03-25D-2	4100065600		41-6802	13 disc brake



BRAKE ASSEMBLY—12.7W x .155/.125 x 10 HIGH PRESSURE
GOODYEAR 511162

NAMES: High pressure brake assembly—12.7W x .155/.125 x 10
Brake—12.7W x 155/125 x 10 aircraft landing wheel
Brake assembly—12.7W x 10 (British)
Multiple disc brake—12.7W x 10 H.P.
Hydraulic brake—12.7W x .155/.125 x 10
Landing wheel brake—12.7W x .155/.125 x 10 H.P.

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter 12.7 inches
Rotating disc thickness155 inch
Stationary disc thickness125 inch
Number of pairs of discs 10
Weight approximately 61.2 pounds

RELATIONSHIP OF PARTS: Used with:
Wheel assembly—16.00-16 low pressure landing, manufacturer's part number 530476.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 511162M

A. S. C. STOCK NUMBER: 4109 511162M

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/895

INTERCHANGEABILITY NOTE: Brake 511591 has "AN" fittings ($\frac{9}{16}$ "—18 thd.) but is otherwise interchangeable with 511162 which has "AC" fittings ($\frac{9}{16}$ "—20 thd.).



BRAKE ASSEMBLY—12.7 x .100/.125 x 14 HIGH PRESSURE

GOODYEAR 510675

NAMES: High pressure brake assembly—12.7 x .100/.125 x 14 Brake assembly—12.7 x 14 (British)
 Brake—12.7 x 100/125 x 14 aircraft landing wheel Brake assembly—12.7 x 14 in. type 2 wheel

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter 12.7 inches
- Rotating disc thickness 0.100 inch
- Stationary disc thickness 0.125 inch
- Number of pairs of discs 14
- Weight 50½ pounds

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—47 smooth contour landing,
 manufacturer's part number 530005 A. E. Reference Number 41-6900

ARMY

A. E. REFERENCE NUMBER: 41-6901

SPECIFICATIONS:

- General AN-W-6
- Superseded 25268

MANUFACTURER'S PART AND DRAWING NUMBER: Goodyear 510675M, 510675A, and 510675M1 (repaired brake).

A. S. C. STOCK NUMBER: 4109 510675M; former A. S. C. Stock Number 4100065611.

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

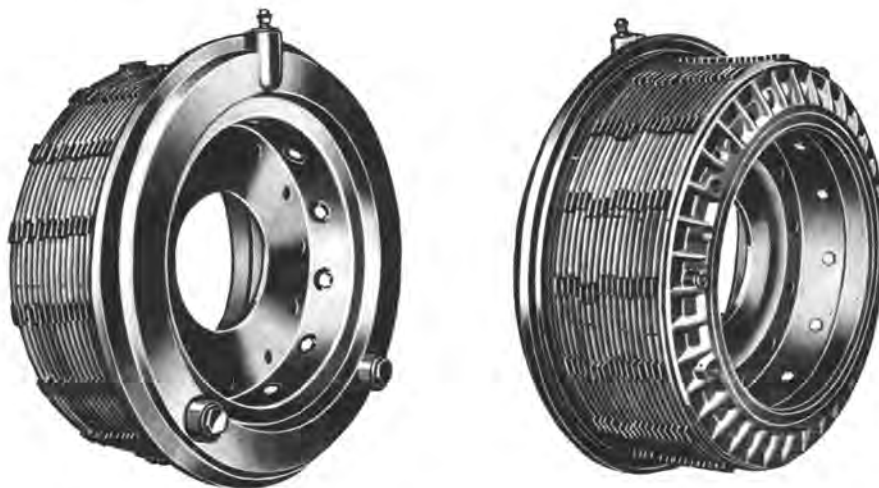
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/856 (new brake); 127A/2381 (repaired brake)



BRAKE ASSEMBLY—12.7 x .100/.125 x 16
GOODYEAR 731946

NAMES: Low pressure brake assembly—12.7 x .100/.125 x 16 Brake assembly—12.7 x 16 (British)
Brake—12.7 x 100/125 x 16 aircraft landing wheel Landing wheel brake—12.7 x 16 low pressure

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter.....	12.7 inches
Rotating disc thickness.....	0.100 inch
Stationary disc thickness.....	0.125 inch
Number of pairs of discs.....	16
Weight.....	approximately 56½ pounds (magnesium) 59.4 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—44 smooth contour landing,
manufacturer's part number 731943..... A. E. Reference Number 41-6850

ARMY

A. E. REFERENCE NUMBER: 41-6851

SPECIFICATIONS:

General..... AN-W-6

MANUFACTURER'S PART AND DRAWING NUMBER: Goodyear 731946

A. S. C. STOCK NUMBER: 4109 731946; former ASC number 4100065620

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

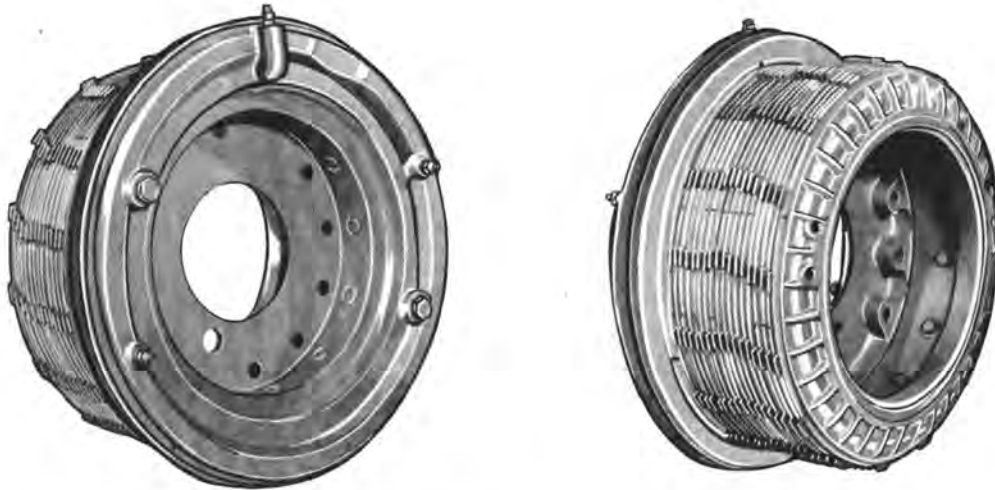
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement.

BRITISH

REFERENCE NUMBER: 127A/841



**BRAKE ASSEMBLY—12.7 x .100/.125 x 17
GOODYEAR 510628**

NAMES: Brake—12.7 x 100/125 x 17 aircraft landing wheel Hydraulic brake—12.7 x .100/.125 x 17
 Brake assembly—12.7 x 17 (British) Landing wheel brake—12.7 x .100/.125 x 17
 Multiple disc brake—12.7 x 17

DESCRIPTION: This is a low pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter 12.7 inches
- Rotating disc thickness100 inch
- Stationary disc thickness125 inch
- Number of pairs of discs17
- Weight approximately 64.5 pounds

RELATIONSHIP OF PARTS: Used with:
Wheel assembly—47 smooth contour landing, manufacturer's part number 530144.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 510628A

A. S. C. STOCK NUMBER: 4109 510628A

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/839



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—14.5W x .155/.094 x 7 HIGH PRESSURE

GOODYEAR 511064

NAMES: High pressure brake assembly—14.5W x .155/.094 x 7
Brake—14.5 x 155/094 x 7 aircraft landing wheel
Multiple disc brake—14.5W x 7 H.P.
Hydraulic brake—14.5 x .155/.094 x 7
Landing wheel brake—14.5 x .155/.094 x 7 H.P.

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

Brake disc outside diameter	14.5 inches
Rotating disc thickness	.155 inch
Stationary disc thickness	.094 inch
Number of pairs of discs	7
Weight	approximately 57 pounds (magnesium anchor bracket) 62 pounds (aluminum anchor bracket)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—17.00-20 low pressure landing,
manufacturer's part number 530402. A. E. Reference Number 41-6950.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General: AN-W-6

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co., 511064MS (magnesium anchor bracket); 511064AS (aluminum anchor bracket).

A. S. C. STOCK NUMBER: 4109 511064MS

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



**BRAKE ASSEMBLY—14.5W x .155/.094 x 9 HIGH PRESSURE
GOODYEAR 511031**

NAMES: High pressure brake assembly—14.5 x .155/.094 x 9 Brake assembly—14.5 x 9 (British)
Brake—14.5 x 155 x 094 x 9 aircraft landing wheel Hydraulic brake—14.5 x .155/.094 x 9

DESCRIPTION: This is a high pressure multiple disc brake.

CHARACTERISTICS:

- Brake disc outside diameter.....14.5 inches
- Rotating disc thickness.....0.155 inch
- Stationary disc thickness.....0.094 inch
- Number of pairs of discs.....9
- Weight.....approximately 63 pounds (magnesium anchor bracket)
69 pounds (aluminum anchor bracket)

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—17.00—20 low pressure landing,
manufacturer's part number 530402.....A. E. Reference Number 41-6950

ARMY

A. E. REFERENCE NUMBER: 41-6951

SPECIFICATIONS:

- General.....AN-W-6
- Superseded.....25268

MANUFACTURER'S PART NUMBER: Goodyear Tire & Rubber Co. 511031M and 511031A

A. S. C. STOCK NUMBER: 4109 511031M; former A. S. C. Number 4100079000

TECHNICAL ORDER NUMBER: 03-25D-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/865



**BRAKE ASSEMBLY—14½ x 10⅛ TWO ROTOR LIGHT DUTY DISC
BENDIX 58976**

- NAMES:** Brake—14.50" disc
 Brake assembly—14½ x 10⅛ (British)
 Two rotor light duty disc brake assembly—14½ x 10⅛
 Hydraulic brake—14½ x 10⅛
 Light duty disc brake—14½ x 10⅛
 Landing wheel brake—14½ x 10⅛

CHARACTERISTICS:

- Brake disc outside diameter.....14⅞ inches (across flats)
 Brake disc inside diameter.....10.0 inches
 Weight.....approximately 38 pounds

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—36 smooth contour landing,
 manufacturer's part number 58141.....A. E. Reference Number 41-6650

ARMY

A. E. REFERENCE NUMBER: 41-6655

SPECIFICATIONS:

General.....AN-W-6

MANUFACTURER'S DRAWING NUMBER: Bendix Aviation Corp. 58976

A. S. C. STOCK NUMBER: 4103 58976; former A. S. C. Number 4100099713

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

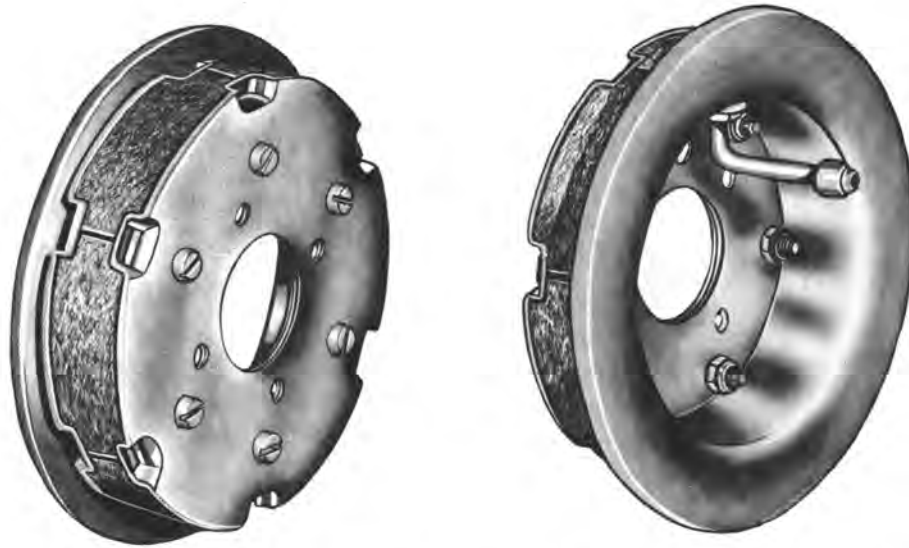
ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/892



BRAKE ASSEMBLY—5 x 1 EXPANDER TUBE

HAYES D-2-113

NAMES: Expander tube brake assembly—5 x 1
Brake—5 x 1 aircraft landing wheel

Hydraulic brake—5 x 1
Landing wheel brake—5 x 1 E.T.

DESCRIPTION: This is an expander tube brake containing a single tube.

CHARACTERISTICS:

Brake shoe diameter 5 inches
Brake shoe width 1 inch
Weight approximately 1.375 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—8.00-4 low pressure landing, manufacturer's part number D-3-13A or D-3-14

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART AND DRAWING NUMBER: Hayes Industries, Inc. D-2-113

A. S. C. STOCK NUMBER: 4111 D2-113

TECHNICAL ORDER NUMBER: AN 03-25B-9

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

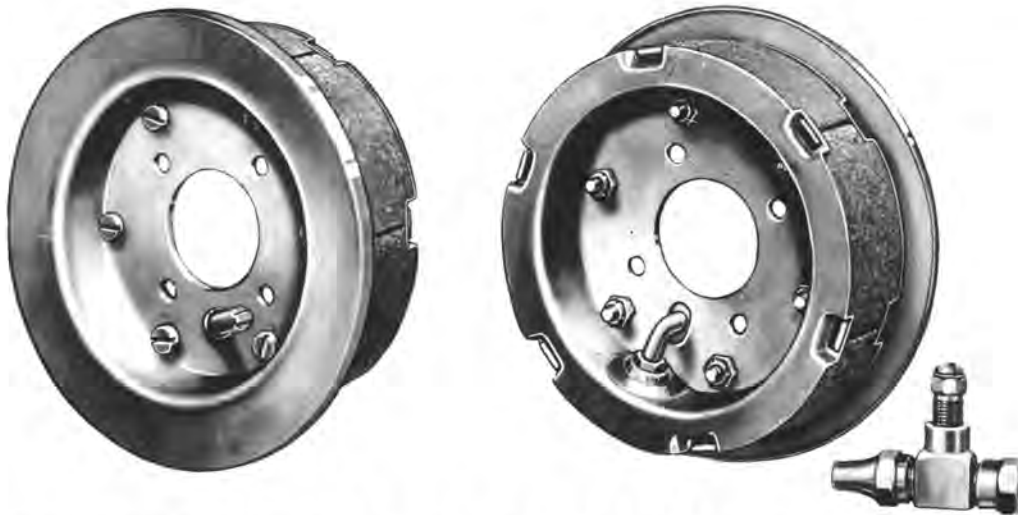
SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—5 x 1½ EXPANDER TUBE

HAYES D-2-112 (L/R)

NAMES: Expander tube brake assembly—5 x 1½ Hydraulic brake—5 x 1½
Brake assembly—5 x 1½ Landing wheel brake—5 x 1½

DESCRIPTION: This is an expander tube brake. The only difference between the right- and left-hand brakes lies in the bend of the expander tube nozzle. This prevents their being interchangeable. However, if the proper expander tubes are available the brakes are interchangeable.

CHARACTERISTICS:

Brake shoe diameter 5 inches
Brake shoe width 1½ inches
Weight approximately 1 pound

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—6.00-6 low pressure landing,
manufacturer's part number D-3-210 A. E. Reference Number 41-5000
or
Wheel assembly—6.00-6 low pressure landing,
manufacturer's part number D-3-105 A. E. Reference Number 41-5050

ARMY

A. E. REFERENCE NUMBER: 41-5001

SPECIFICATIONS:

General AN-W-6
Superseded 25267

MANUFACTURER'S PART NUMBER: Hayes Industries, Inc. D-2-112L and D-2-112R

A. S. C. STOCK NUMBER: 4111 D2-112L and 4111 D2-112R; former A. S. C. numbers 4100041850 for left, 4100041851 for right

TECHNICAL ORDER NUMBER: AN 03-25B-9 (former T.O. Number 03-25B-2)

PRODUCTION STATUS: Not under procurement for initial installation. Superseded by and interchangeable with brake D-2-250.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement.

BRITISH

REFERENCE NUMBER: 127A/889 for right, 127A/890 for left.



LEFT HAND **RIGHT HAND**

BRAKE ASSEMBLY—5 x 1½ EXPANDER TUBE
HAYES D-2-250 (L/R)

NAMES: Expander tube brake assembly—5 x 1½ Hydraulic brake—5 x 1½
Brake assembly—5 x 1½ (British) Landing wheel brake—5 x 1½ expander tube

DESCRIPTION: This is an expander tube brake. The only difference between the right and left-hand brakes lies in the bend of the expander tube nozzle. This prevents their being interchangeable. However, if the proper expander tubes are available the brakes are interchangeable.

CHARACTERISTICS:

Brake shoe diameter 5 inches
Brake shoe width 1½ inches
Weight approximately 1¾ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—6.00-6 low pressure landing,
manufacturer's part number D-3-210 A. E. Reference Number 41-5000
or
Wheel assembly—6.00-6 low pressure landing,
manufacturer's part number D-3-105 A. E. Reference Number 41-5050

ARMY

A. E. REFERENCE NUMBER: 41-5004

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: Hayes Industries, Inc. D-2-250L and D-2-250R

A. S. C. STOCK NUMBER: 4111 D2-250L and 4111 D2-250R; former A. S. C. numbers 4100041860 for left, 4100041861 for right

TECHNICAL ORDER NUMBER: AN 03-25B-9 (former T.O. Number 03-25B-2)

PRODUCTION STATUS: Under procurement. Supersedes and interchangeable with brake D-2-112.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/870 for right, 127A/888 for left



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—9 x 1½ EXPANDER TUBE HAYES G-2-122

NAMES: Expander tube brake assembly—9 x 1½ Landing wheel brake—9 x 1½
 Hydraulic brake—9 x 1½ Brake assembly—9 x 1½

DESCRIPTION: This is an expander tube brake containing a single tube.

CHARACTERISTICS:

Brake shoe diameter 9 inches
Brake shoe width 1½ inches
Weight approximately 4 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel Aerno	Wheel Assembly	Manufacturer's Part Numbers
41-5250	7.50—10.00 low pressure landing	G-3-73
41-5300	7.50—10.00 low pressure landing	G-3-81
None	7.50—10.00 low pressure landing	G-3-82
None	6.50—10.00 low pressure landing	G-3-109
None	7.50—10.00 low pressure landing	G-3-17
		G-3-145

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:

General AN-W-6
Superseded 25268

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

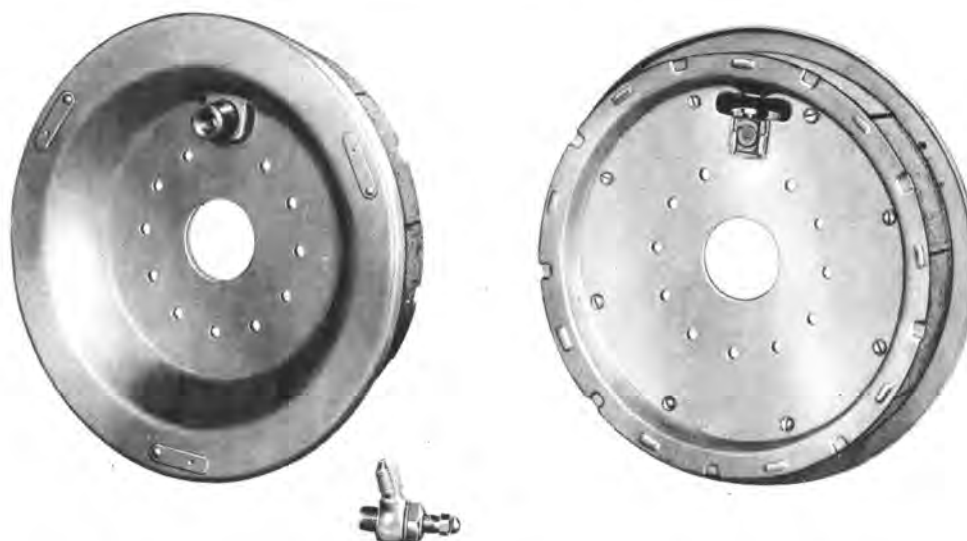
SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British, C—Commercial

Manufacturer	Aerno	Manu- facturer's Drawing and Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	Former A.S.C. Stock Number	British Reference Number	Current Model (X)	Remarks
Hayes Industries, Inc.	41-5305	G-2-122	A-N-B	4111 G2-122	03-258-9	4100043930	127A/860	X	Synthetic expander tube for use with AN-VV-0-366 hydraulic fluid. Supersedes and interchangeable with G-2-67.
Hayes Industries, Inc.	41-5301	G-2-67	A-N-B	4111 G2-67	03-258-2	4100043900	127A/819		Natural rubber tube for use with 3586 hydraulic fluid. Former A.S.C. Stock Number 4100043900.
Hayes Industries, Inc.	41-5301	G-2-67-1	A-N	4111 G67-1	03-258-2				Identical with G-2-67 except less fairing.



BRAKE ASSEMBLY—9 x 2 EXPANDER TUBE

HAYES G-2-210

NAMES: Expander tube brake assembly—9 x 2
Brake—9 x 2 aircraft landing wheel
Brake assembly—9 x 2 (British)

Brake, hydraulic—9 x 2
Hydraulic brake—9 x 2 expander tube

DESCRIPTION: This is an expander tube brake.

CHARACTERISTICS:

Brake shoe diameter 9 inches
Brake shoe width 2 inches
Weight approximately 4½ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—7.50-10 low pressure landing,
manufacturer's part numbers G-3-49, G-3-39,
G-3-237 A. E. Reference Number 41-5200

ARMY

A. E. REFERENCE NUMBER: 41-5201

SPECIFICATIONS:

General AN-W-6
Superseded 25268

MANUFACTURER'S DRAWING NUMBER: Hayes Industries, Inc. G-2-210 and G-2-210-1 (less fairing)

A. S. C. STOCK NUMBER: 4111 G2-210 and 4111 G2-210-1; former A. S. C. Number 4100099840

TECHNICAL ORDER NUMBER: AN 03-25B-9 (former T.O. Number 03-25B-2)

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

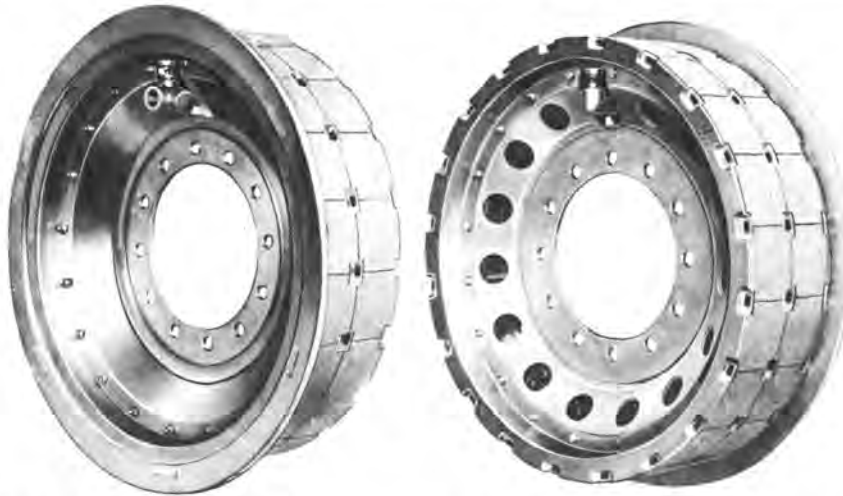
F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

BRITISH

REFERENCE NUMBER: 127A/863



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—20 x 2³/₄ DUPLEX EXPANDER TUBE

HAYES H-2-257

NAMES: Brake—20 x 2³/₄ aircraft landing wheel
Brake assembly—20 x 2³/₄ (British)
Brake assembly—20-inch duplex

Hydraulic brake—20 x 2³/₄
Landing wheel brake—20 x 2³/₄

DESCRIPTION: This is a duplex expander tube brake.

CHARACTERISTICS:

Brake shoe diameter 20 inches
Brake shoe width 2³/₄ inches
Weight approximately 47¹/₂ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—19.00-23 low pressure landing,
manufacturer's part number H-3-38 A. E. Reference Number 41-7100

ARMY

A. E. REFERENCE NUMBER: 41-7101

SPECIFICATIONS:

General AN-W-6
Superseded 25268

A. S. C. STOCK NUMBER: 4111 H2-257-1; former A. S. C. Stock Number 4100091400

TECHNICAL ORDER NUMBER: AN 03-25B-9 and 03-25B-12; former T.O. Number 03-25B-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

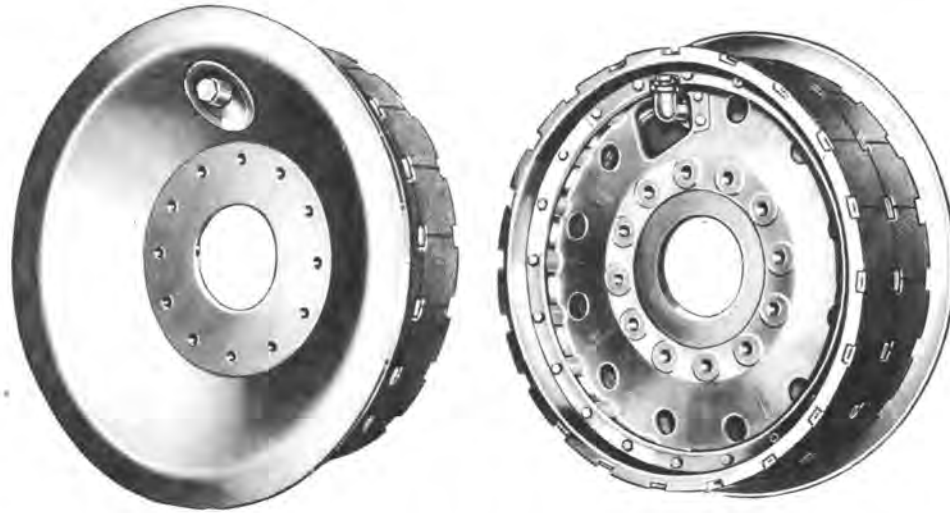
PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/878

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 3
A—Army, N—Navy, B—British, C—Commercial

Manufacturer	Manufacturer's Drawing and Part Number	Used By	Army Technical Order Number	British Reference Number	Current Model (X)	Remarks
Hayes Industries, Inc.	H-2-257	A-N-B	AN 03-25B-9 03-25B-12			This brake has replaced H-2-117, but H-2-117 cannot be substituted for H-2-257.
	H-2-257-1	A-N-B	AN 03-25B-9 03-25B-12	127/878	(X)	Identical with H-2-257 except less fairing. Most installations do not require fairing.
	H-2-117	A-B		127A/805		



**BRAKE ASSEMBLY—20 x 2³/₄ DUPLEX EXPANDER TUBE INNER
HAYES H-2-76**

NAMES: Duplex expander tube (inner) brake assembly—20 x 2³/₄
Brake—20 x 2³/₄ aircraft landing wheel
Brake assembly—20 x 2³/₄ (British)
Brake assembly—20-inch low pressure wheel-inboard-duplex

DESCRIPTION: This is a duplex expander tube brake. Used for the inboard wheels on dual wheel airplanes.

CHARACTERISTICS:

Brake shoe diameter 20 inches
Brake shoe width 2³/₄ inches
Weight approximately 37 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—56 smooth contour landing,
manufacturer's part number H-3-101 A. E. Reference Number 41-7250

ARMY

A. E. REFERENCE NUMBER: 41-7251

SPECIFICATIONS:

General AN-W-6
Superseded 25268

MANUFACTURER'S PART NUMBER: H-2 76A and H-2-76M

A. S. C. STOCK NUMBER: 4111 H2-76A and 4111 H2-76M; former A. S. C. Stock Numbers 4100096025 for H-2-76A; 4100096030 for H-2-76M.

TECHNICAL ORDER NUMBER: AN 03-25B-9 and 03-25B-7; former T. O. Number 03-25B-2.

PRODUCTION STATUS: Not under procurement. H-2-76 has been replaced by H-2-258-1, which has a greater braking capacity than H-2-76, but is otherwise interchangeable.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement.

BRITISH

REFERENCE NUMBER: 127A/835 (for H-2-76M)



BRAKE ASSEMBLY—20 x 2³/₄ DUPLEX EXPANDER TUBE OUTER

HAYES H-2-109

NAMES: Duplex expander tube outer brake assembly—20 x 2³/₄
 Brake—20 x 2³/₄ aircraft landing wheel
 Brake assembly—20 x 2³/₄ (British)
 Brake assembly—20 inch low pressure wheel-outboard-duplex

DESCRIPTION: This is a duplex expander tube brake. Used for the outboard wheels on dual wheel airplanes.

CHARACTERISTICS:

Brake shoe diameter 20 inches
 Brake shoe width 2³/₄ inches
 Weight approximately 36 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—56 smooth contour,
 manufacturer's part number H-3-101 A. E. Reference Number 41-7250

ARMY

A. E. REFERENCE NUMBER: 41-7254

SPECIFICATIONS:

General AN-W-6
 Superseded 25268

MANUFACTURER'S DRAWING NUMBER: Hayes H-2-109A, H-2-109M, and H-2-109M1

A. S. C. STOCK NUMBER: 4111 H2-109A, 4111 H2-109M, and 4111 H2-109M1; former A. S. C. Stock Numbers 4100096038 for H-2-109A; 4100096040 for H-2-109M

TECHNICAL ORDER NUMBER: AN 03-25B-9 and 03-25B-7; former T. O. Number 03-25B-2

PRODUCTION STATUS: Not under procurement. H-2-109 has been replaced by H-2-259-1, which has a greater braking capacity than H-2-109, but is otherwise interchangeable.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

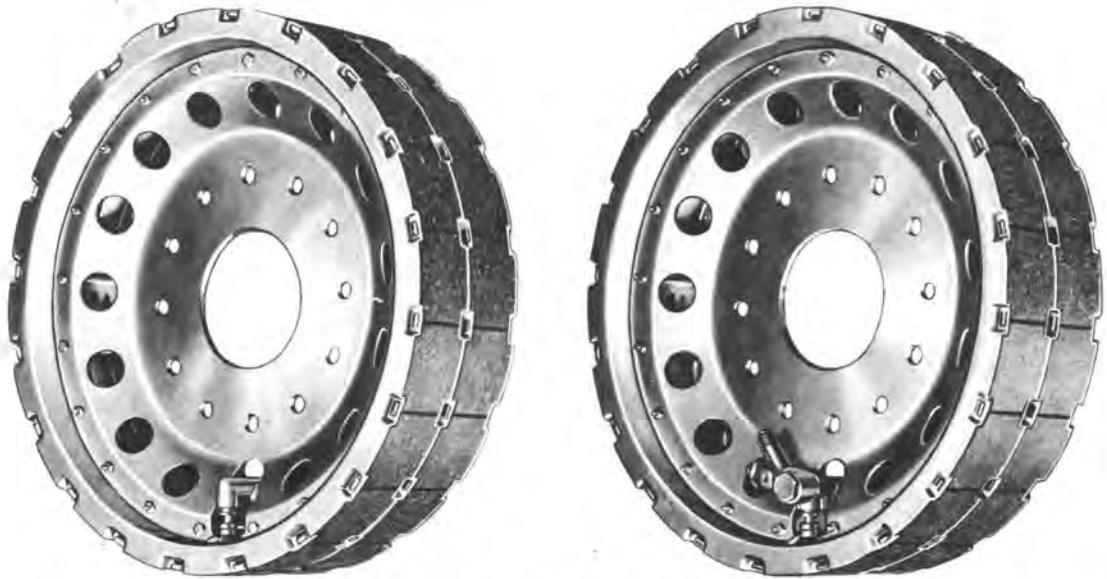
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement.

BRITISH

REFERENCE NUMBER: 127A/800 (for H-2-109M)



BRAKE ASSEMBLY—20 x 2³/₄ DUPLEX EXPANDER TUBE INNER

HAYES H-2-258-1

NAMES: Duplex expander tube (inner) brake assembly—20 x 2³/₄
 Brake—20 x 2³/₄ aircraft landing wheel
 Brake assembly—20 x 2³/₄ (British)
 Brake assembly—20-inch duplex inboard

DESCRIPTION: This is a duplex expander tube brake. Used for the inboard wheels on dual wheel airplanes.

CHARACTERISTICS:

Brake shoe diameter.....20 inches
 Brake shoe width.....2³/₄ inches
 Weight.....approximately 50¹/₂ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—56 smooth contour,
 manufacturer's part number H-3-101.....A. E. Reference Number 41-7250

ARMY

A. E. REFERENCE NUMBER: 41-7255

SPECIFICATIONS:

General.....AN-W-6

MANUFACTURER'S PART NUMBER: Hayes Industries H-2-258 and H-2-258-1 (less fairing)

A. S. C. STOCK NUMBER: 4111 H2-258 and 4111 H2-258-1; former A. S. C. Stock Number 4100091405

TECHNICAL ORDER NUMBER: AN 03-25B-9, 03-25B-12; former T. O. Number 03-25B-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

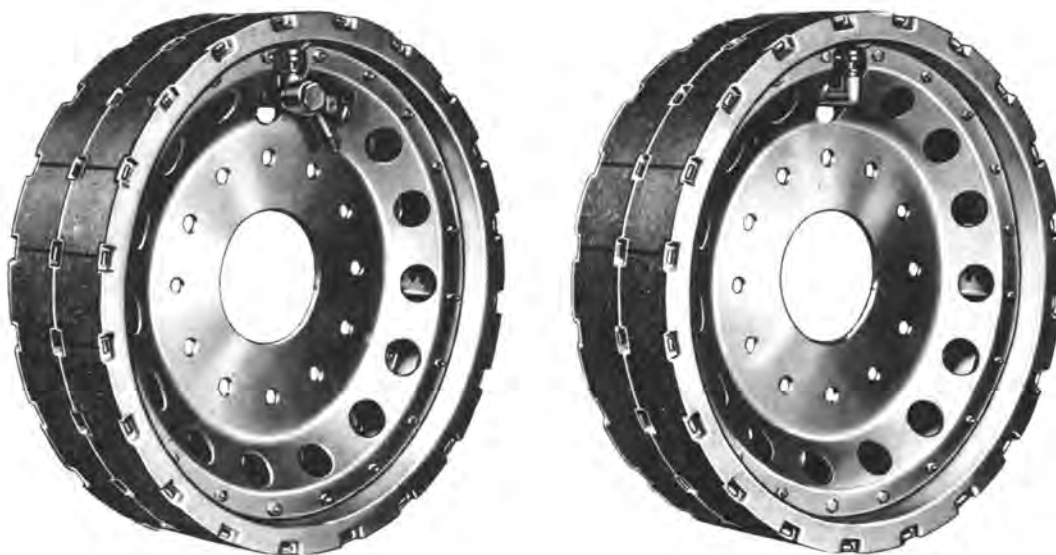
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/869 for H-2-258
 127A/884 for H-2-258-1



**BRAKE ASSEMBLY—20 x 2³/₄ DUPLEX EXPANDER TUBE OUTER
HAYES H-2-259-1**

NAMES: Brake—20 x 2³/₄ aircraft landing wheel
Brake assembly—20 x 2³/₄ (British)
Duplex expander tube (outer) brake assembly—20 x 2³/₄
Brake assembly—20-inch duplex outboard

DESCRIPTION: This is a duplex expander tube brake. Used for the outboard wheels on dual wheel airplanes.

CHARACTERISTICS:

Brake shoe diameter 20 inches
Brake shoe width 2³/₄ inches
Weight approximately 50¹/₂ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—56 smooth contour landing,
manufacturer's part number H-3-101 A. E. Reference Number 41-7250

ARMY

A. E. REFERENCE NUMBER: 41-7256

SPECIFICATIONS:

General AN-W-6

A. S. C. STOCK NUMBER: 4111 H2-259 and 4111 H2-259-1; former A. S. C. Stock Number 4100091410

TECHNICAL ORDER NUMBER: AN 03-25B-9, 03-25B-12; former T. O. Number 03-25B-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/883 for H-2-259
127A/868 for H-2-259-1



BRAKE ASSEMBLY—6¼ x 1

**FIRESTONE 6CA75 (L) 6CA36 (R)
FIRESTONE 6CA39 (L) 6CA34 (R)**

NAMES: Brake—6¼ x 1 aircraft landing wheel Mechanical brake—6¼ x 1
Landing wheel brake—6¼ x 1

DESCRIPTION: This is a mechanical brake which contains no brake lining on the expanding shoe. The lining is a part of the wheel brake drum.

CHARACTERISTICS:

Brake shoe diameter 6¼ inches
Brake shoe width 1 inch
Weight approximately 1.44 pounds

RELATIONSHIP OF PARTS: 6CA75 and 6CA36 brake assemblies are used with 6CA71 wheel to form 6C4HB wheel and brake assembly for installation on L-2 airplane; 6CA39 and 6CA34 brake assemblies are used with 6CA72 wheel to form 6C5HB wheel and brake assembly for installation on L-3 airplane.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: 6CA75-66-L, 6CA39-66-L, 6CA36-66-R, 6CA34-66-R

A. S. C. STOCK NUMBER: 4107 6CA75, 4107 6CA39L, 4107 6CA36, 4107 6CA34R

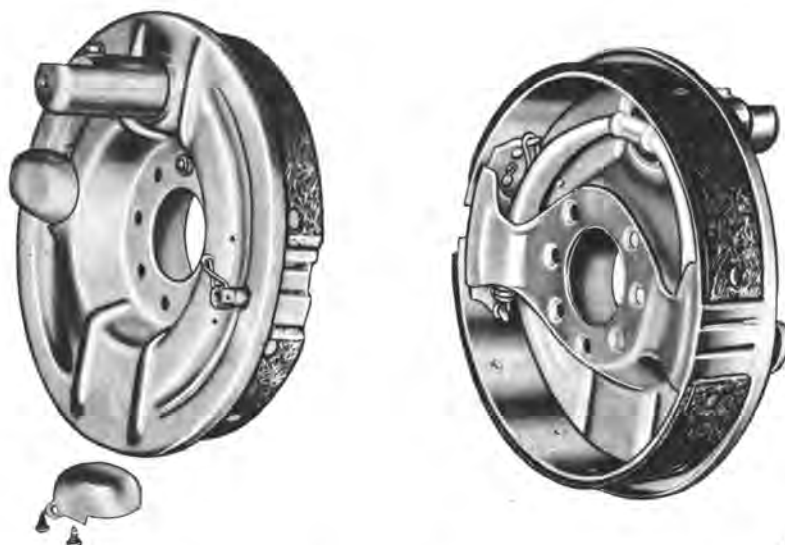
PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a part of complete wheel and brake assembly for initial installation. Stocked and shipped separately for replacement purposes.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.



BRAKE ASSEMBLY—6½ x 1¼

FIRESTONE 6CA94 (L) 6CA95 (R)

NAMES: Brake—6½ x 1¼ aircraft landing wheel
Hydraulic brake—6½ x 1¼

Landing wheel brake—6½ x 1¼

DESCRIPTION: This is a hydraulic shoe brake.

CHARACTERISTICS:

- Brake shoe diameter 6½ inches
- Brake shoe width 1¼ inches
- Weight approximately 2.24 pounds
- Inlet fitting assemblies use 90° inlet to control cylinder
- Inlet fitting assemblies use 45° inlet to control cylinder

RELATIONSHIP OF PARTS: 6CA94-90 and 6CA95-90 brake assemblies are used with 6CA81 wheel to form 6C5YFB-90 wheel and brake assembly for installation on PT-22 airplane. 6CA94-51 and 6CA95-51 brake assemblies are used with 6CA81 wheel to form 6C5YFB-51 wheel and brake assembly for installation on L-6 airplane.

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S ASSEMBLY DRAWING NUMBER: 6C2009

MANUFACTURER'S PART OR DRAWING NUMBER: Firestone Tire & Rubber Co. 6CA94-90 (left hand), 6CA94-61 (left hand), 6CA95-90 (right hand), 6CA95-51 (right hand)

A. S. C. STOCK NUMBER: 4107 6CA94-90, 4107 6CA94-51, 4107 6CA95-90, 4107 6CA95-51

TECHNICAL ORDER NUMBER: 03-25HB-1

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as part of complete wheel and brake assembly for initial installation. Stocked and shipped separately for replacement purposes.

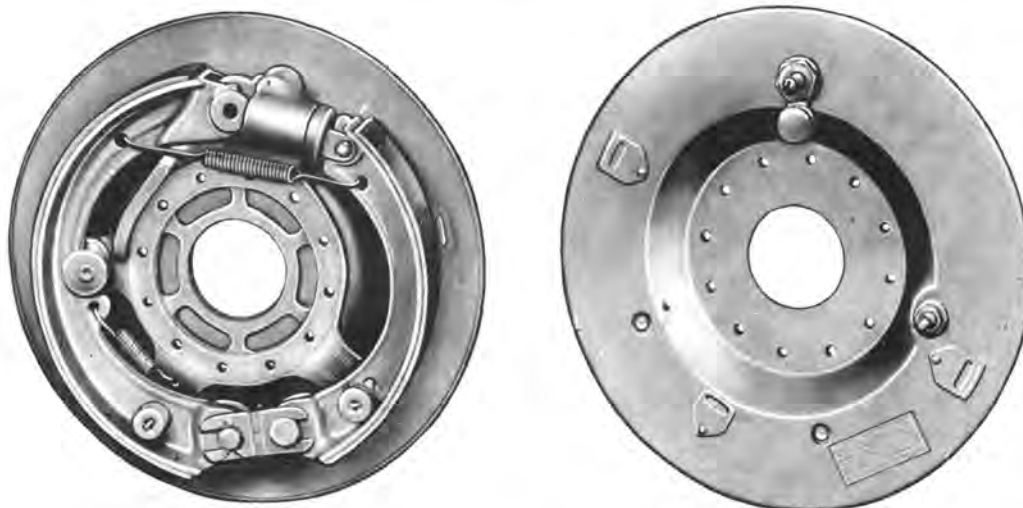
ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—10 x 1½

BENDIX 57863 (L) 57864 (R)

NAMES: Brake—10 x 1½ aircraft landing wheel
 Brake assembly—10 x 1½ (British)
 Hydraulic brake—10 x 1½
 Landing wheel brake—10 x 1½

DESCRIPTION: This is a single-servo hydraulic shoe brake. It has a synthetic rubber piston cup, and uses a petroleum base hydraulic fluid. The picture shown is for the right-hand brake; the left-hand brake is a mirror image of the view shown.

CHARACTERISTICS:

Brake shoe diameter 10 inches
Brake shoe width 1½ inches
Weight approximately 4½ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—24 streamline landing,
manufacturer's part number 56372 A. E. Reference Number 41-5150

ARMY

A. E. REFERENCE NUMBERS: 41-5155 for left hand; 41-5156 for right hand

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S DRAWING NUMBER: Bendix Products Division 57863 for left hand; 57864 for right hand

A. S. C. STOCK NUMBER: 4103 57863L and 4103 57864R

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBERS: 127A/714 (left hand); 127A/715 (right hand)



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—11 x 2

HAYES G-2-97 G-2-299

NAMES: Brake—11 x 2 aircraft landing wheel
Hydraulic brake—11 x 2
Landing wheel brake—11 x 2
Reversible shoe brake—11 x 2

DESCRIPTION: This is a reversible hydraulic shoe brake. Right- and left-hand brakes may be interchanged by placing the red spring forward of the black spring when installed on the airplane.

CHARACTERISTICS:
Brake shoe diameter 11 inches
Brake shoe width 2 inches
Weight approximately 7 pounds

RELATIONSHIP OF PARTS: Used with:
Wheel assembly—27 smooth contour landing,
manufacturer's part number G-3-1A A. E. Reference Number 41-5750
or
Wheel assembly—27 smooth contour landing,
manufacturer's part number 27-D-2 (Firestone) A. E. Reference Number 41-5770

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:
General AN-W-6
Superseded 25268

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British, C—Commercial

Aerno	Manufacturer	Manu- facturer's Drawing Number	Used By	Air Service Command Stock Number	Former A.S.C. Stock Number	Army Technical Order Number	British Reference Number	Remarks
41-5751	Hayes Industries, Inc.	G-2-97 L/R	A-N-B	4111 G2-97L 4111 G2-97R	4100059700 4100059800	AN-03-25B-8	127A/821 127A/820	G-2-97L differs from G-2-97R only in the location of the red and black spring. This brake uses 3580 hydraulic fluid (not winterized).
41-5755	Hayes Industries, Inc.	G-2-299L/R	A-N	4111 G2-299L 4111 G2-299R		AN-03-25B-8		G-2-299 is interchangeable with G-2-97, but uses AN-VV-0-366 hydraulic fluid (winterized).



BRAKE ASSEMBLY—11 x 2½

BENDIX 57270

NAMES: Brake—11 x 2½ aircraft landing wheel
Hydraulic brake—11 x 2½

Landing wheel brake—11 x 2½

DESCRIPTION: This is a duo-servo hydraulic shoe brake, which may be used for either right-hand or left-hand installation.

CHARACTERISTICS:

- Brake shoe diameter..... 11 inches
- Brake shoe width..... 2½ inches
- Weight..... approximately 6½ pounds

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—27 smooth contour landing,
manufacturer's part number..... A. E. Reference Number 41-5600

ARMY

A. E. REFERENCE NUMBER: 41-5601

SPECIFICATIONS:

- General..... AN-W-6
- Superseded..... 25268

MANUFACTURER'S DRAWING NUMBER: Bendix Products Division 57270

A. S. C. STOCK NUMBER: 4103 57270; former A. S. C. Stock Number 4100051800

TECHNICAL ORDER NUMBER: 03-25C-7

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.



BRAKE ASSEMBLY—11 x 3

HAYES H-2-288

NAMES: Brake—11 x 3 aircraft landing wheel
Brake assembly —11 x 3 (British)

Hydraulic brake—11 x 3
Landing wheel brake—11 x 3

DESCRIPTION: This is a reversible hydraulic shoe brake. Right- and left-hand brakes may be interchanged by placing the red spring forward when installed on the airplane.

CHARACTERISTICS:

- Brake shoe diameter 11 inches
- Brake shoe width 3 inches
- Weight approximately 10 pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—27 smooth contour landing,
manufacturer's part number G-3-297 A. E. Reference Number 41-5650

ARMY

A. E. REFERENCE NUMBER: 41-5651

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: Hayes Industries, Inc. H-2-288L and H-2-288R

A. S. C. STOCK NUMBER: 4111 H2-288L and 4111 H2-288R; former A. S. C. Number 4100059645

TECHNICAL ORDER NUMBER: AN 03-25B-8; former T. O. Number 03-25B-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBERS: 127A/875 (right hand); 127A/876 (left hand)



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—12 x 2¼ HAYES H-2-99

NAMES: Brake—12 x 2¼ aircraft landing wheel
 Brake assembly—12 x 2¼ (British)
 Brake, hydraulic—12 x 2¼ (British)
 Landing wheel brake—12 x 2¼

DESCRIPTION: This is a reversible hydraulic shoe brake. Right- and left-hand brakes may be interchanged by placing the red spring forward of the black spring when installed on the airplane.

CHARACTERISTICS:

Brake shoe diameter.....12 inches
Brake shoe width.....2¼ inches
Weight.....approximately 8½ pounds

RELATIONSHIP OF PARTS: Used with:

Wheel assembly—30 smooth contour landing,
manufacturer's part number H-3-44.....A. E. Reference Number 41-6200

ARMY

A. E. REFERENCE NUMBER: 41-6201

SPECIFICATIONS:

General.....AN-W-6
Superseded.....25268

MANUFACTURER'S DRAWING NUMBER: Hayes H-2-99 R/L

A. S. C. STOCK NUMBER: 4111 H2-99L and 4111 H2-99R; former A. S. C. Stock Numbers 4100065000 for left; 410006550 for right

TECHNICAL ORDER NUMBER: AN 03-25B-8; former T. O. Number 03-25B-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/811 for left hand; 127A/810 for right hand



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—13 x 2½

BENDIX 59799 55941

NAMES: Brake—13 x 2½ aircraft landing wheel
Hydraulic brake—13 x 2½

Landing wheel brake—13 x 2½

DESCRIPTION: This is a duo-servo hydraulic shoe brake.

CHARACTERISTICS:

- Brake shoe diameter 13 inches
- Brake shoe width 2½ inches
- Weight approximately 10 pounds

RELATIONSHIP OF PARTS: Used with:

Aerno	Name	Manufacturer's Drawing Numbers
41-6350	Wheel assembly—33 smooth contour landing	55902
41-6350	Wheel assembly	59180
41-6350	Wheel assembly	57679
None	Wheel assembly—30 x 7 high pressure landing	59179
None	Wheel assembly—31 streamline landing	52723

ARMY

A. E. REFERENCE NUMBER: Refer to column two of chart.

SPECIFICATIONS:

General AN-W-6

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

SPECIFICATIONS: AN-W-6

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British, C—Commercial

Manufacturer	Aerno	Manu- facturer's Drawing Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Bendix Products Div. of	41-6355	59799	A-N	4103 59799			Supersedes and interchangeable with 55941.
Bendix Aviation Corp.	41-6351	55941	A-N-B	4103 55941	03-25D-7	127A/831	Former ASC Stock Number 4100072000.



BRAKES LANDING GEAR SECTION



BRAKE ASSEMBLY—14 x 4

BENDIX 57495

NAMES: Brake—14 x 4 aircraft landing wheel
Brake assembly—14 x 4 (British)

Brake, hydraulic—14 x 4
Landing wheel brake—14 x 4

DESCRIPTION: This is a hydraulic duo-servo shoe brake.

CHARACTERISTICS:

- Brake shoe diameter..... 14 inches
- Brake shoe width..... 4 inches
- Weight..... approximately 15¾ pounds (aluminum)
approximately 13.4 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

- Wheel assembly—34 x 9 high pressure landing,
manufacturer's part number 57405..... A. E. Reference Number 41-6500

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:

- General..... AN-W-6

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete assembly.

ARMY AIRPLANE: See brake chart on page 56.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British, C—Commercial

Manufacturer	Aerno	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Bendix Products Div. of Bendix Aviation Corp.	41-6501	57495A	A-B	4103 57495A	03-25C-7	127A/877	Aluminum shoes; natural rubber cups; uses 3586 fluid.
	41-6506	57495A-S		4103 57495AS			Magnesium shoes; synthetic rubber cups; uses AN-VV-0-366 fluid.
		57495M-S		4103 57495MS			Aluminum shoes; synthetic rubber cups; uses AN-VV-0-366 fluid.
	41-6501	57495A-1		4103 57495A1			Aluminum shoes; less fairing.

BRAKE ASSEMBLIES

Brake Assembly	Type	Aerna	Hayes	Firestone	Goodyear	Bendix	British Reference Number	Size	Wheel Used With	Wheel Aerna	Airplanes Used On		T. O. Number	Brake Weight in Pounds
								Mfr's Part No.	Army		Navy			
5 x 1 Expander Tube			D-2-113					8.00-4 L.P.	D-3-13A&D-3-14		L-4A, H	HE-1, NE-1	03-25B-9	1.375
5 x 1½ Expander Tube		41-5001	D-2-112 (R&L)				127A/890 (L) 127A/889 (R)	6.00-6 L.P.	D-3-210	41-5000	L-5	NR-1	03-25B-9	1.0
5 x 1½ Expander Tube		41-5004	D-2-250 (R&L)				127A/888 (L) 127A/870 (R)	6.00-6 L.P.	D-3-105M&D-3-210	41-5050	L-5	OY-1	03-25B-9	1.75
6¼ x 1 Mechanical	Shoe													
6¼ x 1 Mechanical	Shoe													
6½ x 1¼ Hydraulic	Shoe													
6½ x 1¼ Hydraulic	Shoe													
6.7 x .080/.070 x 10	Disc				731799M			5" Airwheel	731802		F-2, AT-7, C-45	JRB-1, 2; SNB-2	03-25D-2	16
7.6 x .080/.070 x #1	Disc	41-5801			530177-M1		127A/894	27 S.C.	530101	41-5800	A-36, A		03-25D-2	14.5
7.6 x .080/.070 x 6	Disc				218262M			7.50-10 L.P.	218264		AT-8, UC-43, T-50	NH-1, SNC-1, GB-1, 2, GH-1, 2	03-25D-2	9.25 Mg.; 10.2 Al.
7.6 x .100/.125 x 9 H.P.	Disc	41-5901			511124		127A/880	27 S.C. Special	530441	41-5900	P-51B, C, D, P-63A, C, D		03-25D-2	12.58 Mg.; 18.35 Al.
8.0 x 1.25 x .125 Mechanical	Single													
8.0 x 1.25 x .125 Mechanical	Disc	41-5103			511254M		127A/901	6.00-6 L.P.	511135-1, 511413	41-5100	PQ-8A, R-4, B		03-25D-5	2.7
8.0 x 1.5 x .125 Hydraulic	Single													
	Disc	41-5102			511572			6.00-6 L.P.	511413	41-5100	PQ-8A		03-25D-5	2.64 Mg.; 3.22 Al.
					511283				511135-1		R-6, A	HOS-1; TDC-2		
9 x 1½ Expander Tube		41-5301	G-2-67,-1				127A/819	7.50-10 L.P.	G-3-73,-81,-82,-17,-109	41-5250, 5300	L-1A, PT-19, PT-23, PT-26, PT-27, C-61A, K	N2T-1	03-25B-9	4.0
9 x 1½ Expander Tube		41-5305	G-2-122				127A/860	7.50-10 L.P.	G-3-73,-81,-82,-17,-109	41-5250, 5300	R-5A, PT-19A, B, PT-22, PT-23, PT-26, PT-17	N2T-1, H02S-1, GK-1	03-25B-2, 9	4.0
9 x 2 Expander Tube		41-5201	G-2-210,-1				127A/863	7.50-10 L.P.	G-3-39, 49, 237	41-5200	AT-17, A, B, C, D, AT-19, UC-78, B, C	TDR-1, 2; JRC-1	03-25B-9	4.5
10 x 1½	Shoe	41-5151 41-5154						24 streamline	56372	41-5150	PT-13B, D, PT-17, A	N2S-2		4.5
10 x 1½	Shoe	41-5155 41-5156						24 streamline	56372	41-5150	PT-13D, PT-17	N2S-1, 2, 3, 4, 5,		4.5
10.0 x .100/.125 x 5	Disc	41-5451			510548M		127A/838	26 x 6 H.P.	530094	41-5450	P-39D, F, K, L, M, N, O, Q	SO3C-2C; SC-1	03-25D-2	19.4 Mg.; 21.0 Al.
10.0W x .100/.125 x 7 H.P.	Disc	41-5606			511638M			27 S.C.	530761	41-5610	P-63C, D			
10.5 x 2.0 x .375 Hydraulic	Single													
10.5 x 2.0 x .375 Hydraulic	Disc	41-7811			530841-A			24 x 7.7 Ex. H.P.	530840M-1	41-7810	P-51H		03-25D-5	12.45
11 x 2 Reversible	Shoe	41-5751	G-2-97L G-2-97R				127A/821 127A/820	27 S.C.	27D-2 G-3-1A	41-5770 41-5750	BT-12, 13A, 13B, 14, 15, AT-6, A, B, C, D, AT-12, AT-16, CG-4A	SNV-1, 2, SNJ-1, 2, 3, 4, 5	03-25B-8	7.0
11 x 2 Reversible	Shoe	41-5755	G-2-299L G-2-299R					27 S.C.	G-3-1A	41-5750	BT-13B	SNV-2		7.0
11 x 2½	Shoe	41-5601						27 S.C.	57000 (59553)	41-5600	AT-10F, G		03-25C-7	6.5
11 x 3 Reversible	Shoe	41-5651	H-2-288 (L&R)				127A/876 (L) 127A/875 (R)	27 S.C.	G-3-297	41-5650	P-40N, PT-23		03-25D-8	9.2
12 x 2¼ Reversible	Shoe	41-6201	H-2-99L H-2-99R				127A/811 127A/810	30 S.C. Light Duty	H-3-44	41-6200	AT-9, A, UC-64A		03-25B-8	8.5
12 x 3¼ Reversible	Shoe	41-6051	H-2-194L H-2-194R				127A/813 127A/812	30 S.C. Heavy Duty	H-3-159	41-6050	P-40D, E, F, K, L, M, N		03-25B-8	10
12 x 4 Expander Tube			H-2-276-1					34 x 9.9 Ex. H.P.	H-3-255M			BTD-1, SB2D-1	03-25B-9	16.29

Brake Assembly	Type	Aerno	Hayes	Firestone	Goodyear	Bendix	British Reference Number	Wheel Used With		Airplanes Used On		T. O. Number	Brake Weight in Pounds	
								Size	Mfr's Part No.	Wheel Aerno	Army			Navy
12.7 x .155/125 x 5 H.P.	Disc				510967-2MI			15.00-16 L.P.	530161		C-60, A	R50-5, 6	03-25D-2	
12.7 x .100/125 x 7 H.P.	Disc	41-6551			510944			34 x 9 H.P.	530244	41-6550	A-25, A, P-59, A, B	SB2C-1A	03-25D-2	
12.7 x .100/125 x 7 H.P.	Disc	41-6251			511396M			32 x 8 H.P.	530645	41-6250	YP-60E		03-25D-2	
12.7W x .155/094 x 9 H.P.	Disc	41-6601			511831			34 x 9.9 Ex. H.P.	530660	41-6600	P-72			
12.7 x .080/070 x 9	Disc				510021-M		127A/844	15.00-16 L.P.	530161		A-28 A, A-29, A-31, C-56, C-61	PBO-1	03-25D-2	28.25
12.7 x .100/125 x 9	Disc	41-6801			510594M		127A/840	36 S.C.	731029	41-6800	YCG-13, P-38, J, L, M, A-35, A, B, A-32, F-11		03-25D-2	38.4 Mg.; 42.1 Al.
12.7 x .100/125 x 9	Disc	41-6803			511656			36 S.C.	731029	41-6800	YCG-13, CG-13A			37.5
12.7 x .100/125 x 10 H.P.	Disc	41-6286			511611M			32 x 8.8 Ex. H.P.	530545	41-6285	P-75, A			39
12.7W x .155/125 x 10 H.P.	Disc				511162M		127A/895	16.00-16 L.P.	530476		A-30, A, B-37	PV-1, PV-2, PV-2C	03-25D-2	61.2
12.7W x .155/094 x 11 H.P.	Disc				511423M			16.00-16 L.P.	530476			PV-2, 4, P2V		
12.7 x .080/070 x 13	Disc	41-6802			731032M		127A/876	36 S.C.	731029	41-6800	P-38		03-25D-2	34 Mg.; 37 Al.
12.7 x .100/125 x 14 H.P.	Disc	41-6901			510675M		127A/856 (New), 127A/2381 (Rep'd)	47 S.C.	530005	41-6900	A-26 B, B-25, B, C, D, H, J, B-26A, B, P-61A, B, C	PBJ-1	03-25D-2	51.8 Mg.; 56 Al.
12.7 x .100/125 x 16 H.P.	Disc				510840-MI			17.00-16 L.P.	530079		C-54		03-25D-2	85
12.7 x .100/125 x 16	Disc	41-6851			731946		127A/841	44 S.C.	731943	41-6850	A-20G, J, H, K	BD-1, 2	03-25D-2	56.5 Mg.; 59.4 Al.
12.7 x .100/125 x 17	Disc				510628-A		127A/839	47 S.C.	530144		C-47 (Amphibian)	PBY-5A, 5B, OA-10A	03-25D-2	64.5
13 x 2 1/2	Shoe	41-6351				55941	127A/831	30 x 7 H.P. 33 S.C.	59179 59180, 57679, 55902	41-6350	A-24, AT-7, C, A-31, AT-11	SNB-1, 2C, TBD-1	03-25C-7	10
13 x 2 1/2	Shoe	41-6355				59799		33 S.C.	59180, 57679, 55902	41-6350	UC-45B, F, AT-7C, AT-11	SNB-1		10
13 x 3 Expander Tube			H-2-230					32 x 8 H.P.	G-3-197M, G-3-241			SBW-1, 3, TD3R-1, SB2C-1-5, SBF-1, 3, 4	03-25B-9	11.75
14 x 2 3/4 Expander Tube			H-2-78					17.00-16 L.P.	57386			DC-3, B-18	03-25B-2, 9	18.6
14 x 3	Shoe				57584		127A/885	17.00-16 L.P.	57386, 57396, 57580		C-47, A, B, C-53	R4D-1 to 5	03-25C-7 03-25C-9	14
14 x 4	Shoe	41-6501 41-6506			57495 57495A-S		127A/877	34 x 9 H.P.	57405	41-6500	P-47D, G, M		03-25C-7	12.5 Mg.; 15.8 Al.
14 1/2 x 10 1/4 Two Rotor Light Duty	Disc	41-6655				58976	127A/892	36 S.C.	58141, 59503, 58725	41-6650	AT-21		03-25D-2	38
14.5W x .155/094 x 7 H.P.	Disc				511064-MS			17.00-20 L.P.	530402	41-6950	C-54, A, B	R5D-1	03-25D-2	57 Mg.; 62.1 Al.
14.5W x .155/094 x 9 H.P.	Disc	41-6951			511031M		127A/865	17.00-20 L.P.	530402	41-6950	B-26B-1, C, F, G, AT-23A, B, C-62, C-69, C-76	JM-1	03-25D-2	63 Mg.; 69 Al.
14.5 x 2.75 x .485 2-3.2 x 50.3	Single Disc	41-6657			530745			26 x 6.6 Ex. H.P.	530746M-1	41-6656	P-80			24.8 Mg.; 27.9 Al.
16.5 x 2.75 x .437 3-2.75 x 35.8	Single Disc	41-6660			540074			32 x 8.8 Ex. H.P. 26 x 6.6 Ex. H.P.	530746M-1	41-6656	P-82			
20 x 2 3/4 Duplex Expander Tube		41-7101	H-2-257-1				127A/878	19-23 L.P.	H-3-38M-1	41-7100	B-17E, F, C-46A	R5C-1	03-25B-9, 12	47
20 x 2 3/4 Duplex Expander Tube (Inner)		41-7251	H-2-76A, M				127A/835	56 S.C.	H-3-101, H-3-63	41-7250	B-24C, D, E, G, H		03-25B-9, 7	36.0
20 x 2 3/4 Duplex Expander Tube (Inner)		41-7255	H-2-258 H-2-258-1				127A/869 127A/884	56 S.C.	H3-101, 256	41-7520	B-32, B-29, B-24D, E, H, I, J, B-17F, G, C-82, C-87	PB4Y-1, 2; RY-3	03-25B-9, 12	44.8
20 x 2 3/4 Duplex Expander Tube (Outer)		41-7254	H-2-109M, A				127A/800	56 S.C.	H-3-101, H-3-63	41-7250	B-24E, G, H		03-25B-9, 7	36
20 x 2 3/4 Duplex Expander Tube (Outer)		41-7256	H-2-259 H-2-259-1				127A/883 127A/868	56 S.C.	H-3-101, 256	41-7250	B-32, B-29, B-24D, E, H, I, B-17F, G, C-82, C-87	PB4Y-1, 2; RY-3	03-25B-9, 12	44.8
21.5 x .181/109 x 15 H.P.	Disc	41-7421			511402M			65 S.C.	530649M, 530652M	41-7410, 7420	C-74, B-35			216 Mg.; 231 Al.
34.0W x .284/172 x 14 H.P.	Disc	41-7441			530581M			110 S.C.	560042	41-7440	B-36			730

NOTE: To obtain Air Service Command Stock Numbers for brakes, add the manufacturer's code number as a prefix to the brake part number. For example, Goodyear code is 4109, and the A.S.C. Stock Number for 6.7 x 10 disc brake (part number 731799M) is 4109731799M.

MANUFACTURER'S CODE NUMBERS ARE AS FOLLOWS: Bendix Products Division 4103
Firestone Tire & Rubber Co. 4107

Goodyear Tire & Rubber Co. 4109
Hayes Industries, Inc. 4111



WHEELS LANDING GEAR SECTION

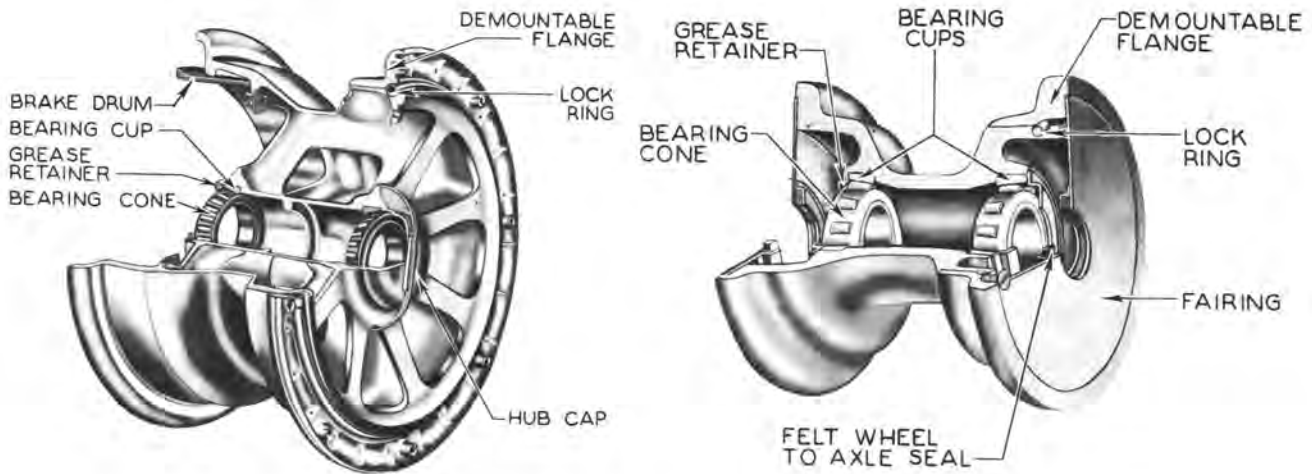


Fig. I

AIRPLANE WHEELS

PURPOSE:

Wheels are part of the landing gear of an airplane. Together with the casing and tube they provide a rolling surface for the airplane during take-off, landing, and while moving or being moved on the ground.

DESCRIPTION:

A typical wheel assembly is shown in Fig. I. It consists of a wheel casting, two sets of bearings, grease retainers, hub cap, usually one or two fairings, and, in the case of main landing wheels, one or two brake drums or cavities. The bearings are of the tapered roller type, consisting of bearing cones, rollers with retaining cage, and bearing cup. Each wheel has the bearing cups pressed or shrunk into place and is furnished with a hub cap or grease retainer to prevent foreign matter from entering the outside bearing. Retainers inboard of the inner bearing prevent grease from reaching the brake linings.

Smoothness of wheel side contour is obtained by a disc formed as a structural part of the wheel or by an auxiliary fairing disc. This also serves to keep mud, snow and ice from collecting inside and causing an unbalanced wheel. Fairings need not be used on retractable wheels where they do not form a part of the wing or fuselage surface when in the retracted position.

The main landing wheels are equipped with single or dual brakes to enable the plane to be stopped within the confines of the landing field. No brakes are used on auxiliary wheels. Brakes are not included as part of wheel assemblies.

There are seven general types of wheels named according to the type of casing with which they are used. As may be seen in Fig. II, the difference between types is principally in the dimensions. The

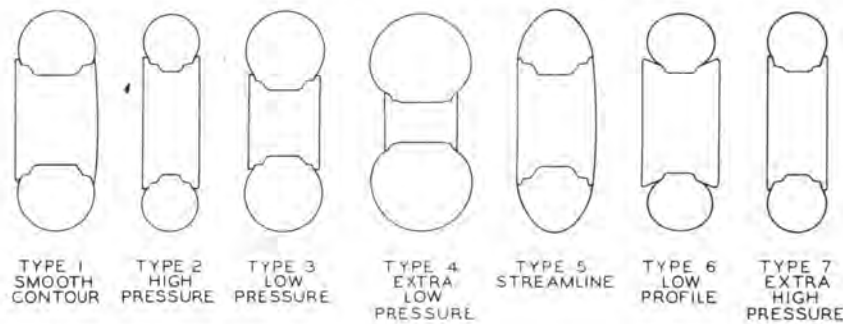


Fig. II

(Continued on Page 59)



AIRPLANE WHEELS

(Continued from Page 58)

Type IV, extra low pressure wheel is wider with respect to its diameter than any of the other types; a Type II high pressure wheel is narrower than the others. The remaining types vary in dimension between these two extremes. The extra wide flange of the low profile wheel provides a reasonably safe rolling surface in the event of a puncture or blow-out, thus reducing the danger of accident from such causes.

A drawing or part number is frequently followed by the letter A or M. This merely indicates that the wheel is made from aluminum or magnesium alloy. If such a letter is lacking, it does not necessarily mean that the wheel is made from some other alloy, since this marking practice is not always followed by the wheel manufacturers.

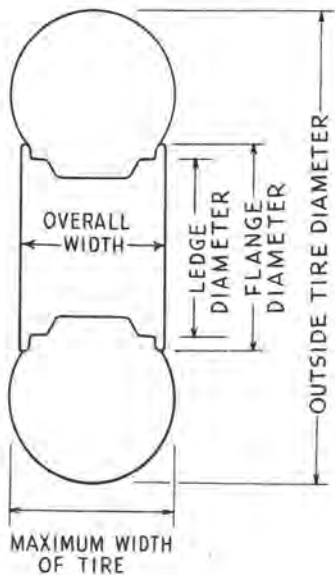


Fig. III

METHOD OF DIMENSIONING:

The dimensions by which a wheel is known are not those of the actual wheel, but of the casing (tire) mounted on it (Fig. III). The outside diameter of the tire is the only dimension given for the smooth contour (Type I), and the streamline (Type V). For the extra low pressure (Type IV) and the low profile (Type VI), the Army uses three dimensions; for example, the first dimension of a 29 x 13-5 extra low pressure wheel is the outside diameter of the tire, the second is the greatest width of the tire and the third is the inside diameter of the tire or the rim diameter of the wheel. Only two dimensions are used for the low pressure (Type III), high pressure (Type II) and extra high pressure (Type VII), that is, the first dimension is dropped in the low pressure and the last dimension in the high and extra high pressure; for example, 19.00-23 low pressure, 32 x 8 high pressure, or 32 x 8.8 in the extra high pressure. For low pressure, this means the tire is 19 inches wide and the rim diameter is 23 inches. For high pressure it indicates the outside tire diameter is 32 inches and the tire is 8 inches wide or on the extra high pressure 8 8/10 inches wide.

INSTALLATION:

To facilitate mounting and demounting the tire, certain features are incorporated into the wheel, as shown in Fig. IV. When a demountable flange is used, one flange of the wheel can be lifted off so the tire can be slipped on or off. The flange may be secured to the wheel by means of a lock ring, interlocking lugs or by bolts. A drop center or flat base rim is used on all wheels. Drop center rims (where the center of the wheel has a smaller diameter than either side of the wheel) may or may not have a demountable flange. Flat base rims must have demountable flanges or be of split type. In the split or divided rim type, the wheel comes in halves held together by bolts.

Wheels may be mounted on two

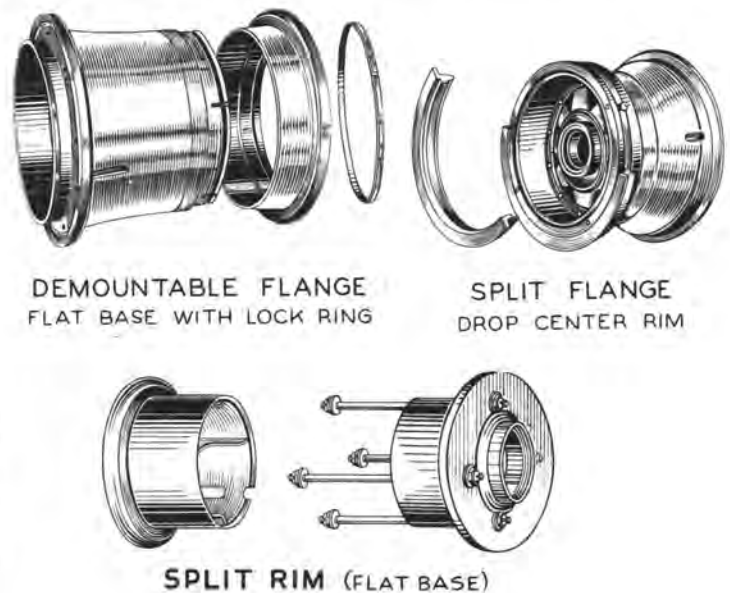


Fig. IV

(Continued on Page 60)



AIRPLANE WHEELS

(Continued from Page 59)

types of axles. The fork, or straight axle goes through the wheel. It is the same diameter throughout and is supported at both ends by a forked strut fitting over the wheel. The other type is the stub, or cantilever axle which is supported on one side only and is larger in diameter at the supporting end than at the free end; this axle is often referred to as a tapered axle.

OPERATION:

Wheels are divided into main landing wheels and auxiliary (nose or tail) wheels and may be used in various combinations. The conventional arrangement consists of two main wheels and a tail wheel. When a nose and two main wheels are used, the arrangement is known as a tricycle type. Where there are heavy loads, as in the case of bombers or cargo planes, four main wheels, set in pairs, may be employed, with either a single or a double auxiliary wheel.

INTERCHANGEABILITY:

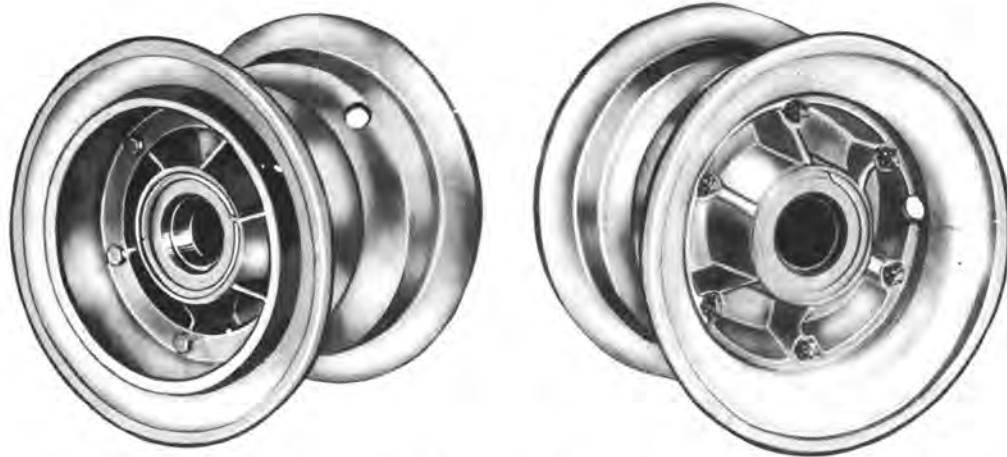
There is very little interchangeability among wheels, except in the case of auxiliary types. Wheels are designed for a specific type of airplane having a given factor for load and braking capacity, and identical conditions are seldom encountered in different airplanes.

Sometimes wheels, dimensionally interchangeable, may be found not to have the same functional characteristics. That is, one may be a light duty and the other a heavy duty wheel; one may have a greater braking capacity than the other; one wheel may have a cavity for use of a disc brake and the other a drum for a shoe brake; the hydraulic requirements for operating the brakes may be different; or one wheel may be designed for a straight type axle—the other for a cantilever axle. Therefore, if any one of these conditions exists, the wheels are not interchangeable.

More interchangeability is found among auxiliary wheels. Braking capacity is not a factor and main wheels may be used as nose wheels whereas the latter cannot be substituted for the former; however, this practice is not recommended except in an absolute emergency.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—6.00-6 LOW PRESSURE LANDING

HAYES D-3-210 D-3-105

CHARACTERISTICS:

- | | |
|---------------------------------------------------|-------------------------------------------------------|
| Rim type split, drop center | Tire diameter 20 inches |
| Flange type fixed | Flange diameter 7.500 inches |
| Brake drum one, for expander tube brake | Ledge diameter 6.000 inches |
| Axle type straight | Overall width 6.813 inches |
| Axle diameter 1.250 inches | Weight approximately 5.81 pounds
(steel) |
| | 5.75 pounds (magnesium) |
| | 7.55 pounds (aluminum) |

RELATIONSHIP OF PARTS: Used with:

- Brake assembly—5 x 1½ expander tube A. E. Reference Number 41-5001
or
- Brake assembly—5 x 1½ expander tube A. E. Reference Number 41-5004
- Casing—7.00-6 low pressure—4-ply A. E. Reference Number 41-5002
- Tube—7.00-6 low pressure A. E. Reference Number 41-5003

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:

- General AN-W-6
- Superseded 25258

TYPE DESIGNATION: Type III

PRODUCTION STATUS: 41-5050 is under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers, brake drum and, if designated, fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement for initial installation.

ALL MODELS BELOW ARE INTERCHANGEABLE Models are used in services as noted in column 5 A—Army, N—Navy, B—British

Manufacturer	Aerno	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Hayes Industries Inc.	41-5000	D-3-210	D-3-210	A-B	4111 D3-210	03-258-1	127A/683	Obsolete. Superseded by A.E. Ref. No. 41-5050
	41-5050	D-3-105	D-3-105M	A-N-B	4111 D3-105M		127A/684	Magnesium
	41-5050	D-3-105	D-3-105A	A-N-B	4111 D3-105A		127A/684	Aluminum
	41-5050	D-3-105	D-3-105M-1	A	4111 D3-105M1			Magnesium, less fairing
	41-5050	D-3-105	D-3-105A-1	A	4111 D3-105A1			Aluminum, less fairing



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—7.50-10 LOW PRESSURE LANDING

HAYES G-3-49

CHARACTERISTICS

- | | | | |
|-------------------------|------------------------------|---------------------------|--------------------------|
| Rim type | drop center | Tire diameter | 26 inches |
| Flange type | fixed | Flange diameter | 11.625 inches |
| Brake drum | one, for expander tube brake | Ledge diameter | 10.000 inches |
| Axle type | stub | Overall width | 7.234 inches |
| Axle diameter | inner: 1.500 inches | Weight | 14.75 pounds (aluminum) |
| | outer: 1.000 inches | | 11.82 pounds (magnesium) |

RELATIONSHIP OF PARTS: Used with:

- | | |
|----------------------------------------------|--------------------------------|
| Brake assembly—9 x 2 expander tube | A. E. Reference Number 41-5201 |
| Casing—8.50-10 low pressure—6-ply | A. E. Reference Number 41-5203 |
| Tube—8.50-10 low pressure | A. E. Reference Number 41-5204 |

ARMY

A. E. REFERENCE NUMBER: 41-5200

SPECIFICATIONS:

- | | |
|----------------------|--------|
| General | AN-W-6 |
| Superseded | 25267 |

TYPE DESIGNATION: Type III

TECHNICAL ORDER NUMBER: 03-25B-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings, grease retainers and fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	British Reference Number	Current Models (X)	Remarks
Hayes Industries Inc.	G-3-49	G-3-49A	A-B	4111 G3-49A	127A/659	X	Aluminum. Supersedes, but not interchangeable with G-3-81A.
	G-3-49	G-3-49M	A-B	4111 G3-49M	127A/659	X	Magnesium. Supersedes, but not interchangeable with G-3-81M.
	G-3-39	G-3-39A	A	4111 G3-39A			Aluminum. Slightly different fairing and hub cap design, other- wise identical to G-3-49A.



WHEEL ASSEMBLY—7.50-10 LOW PRESSURE LANDING

HAYES G-3-81 G-3-73

DESCRIPTION: Photograph is of G-3-81 A and M. G-3-81A-1 and M-1 is the same wheel, less fairing. G-3-73 A and M has no ribs on the spokes and instead of Dzus fasteners, the fairing is secured by a lock ring. G-3-73A-1 and M-1 has no fairing.

CHARACTERISTICS:

Rim type	drop center	Tire diameter	24 inches
Flange type	fixed	Flange diameter	11.625 inches
Brake drum	one, for expander tube brake	Ledge diameter	10.00 inches
Axle type	stub	Overall width	6.750 inches
Axle diameter	inner: 1.500 inches	Weight, G-3-81	approximately 14.4 pounds
	outer: 1.000 inches		(aluminum)
			11.0 pounds (magnesium)
		Weight, G-3-73	12.06 pounds (aluminum)
			9.19 pounds (magnesium)
			11.56 pounds (aluminum
			less fairing)
			8.68 pounds (magnesium
			less fairing)

RELATIONSHIP OF PARTS: Used with:

- Brake assembly—9 x 1½ expander tube A. E. Reference Number 41-5301
- or
- Brake assembly—9 x 1½ expander tube A. E. Reference Number 41-5305
- Casing—7.50-10 low pressure—6-ply (Helicopter) A. E. Reference Number 41-5206
- or
- Casing—7.50-10 low pressure—6-ply A. E. Reference Number 41-5202
- Tube—7.50-10 low pressure A. E. Reference Number 41-5303

(Continued on Page 64)



WHEEL ASSEMBLY—7.50-10 LOW PRESSURE LANDING

(Continued from Page 63)

ARMY

A. E. REFERENCE NUMBER: See chart below.

SPECIFICATIONS:

General AN-W-6
Superseded 25267

TYPE DESIGNATION: Type III

TECHNICAL ORDER NUMBER: AN 03-25B-1

PRODUCTION STATUS: Aerno 41-5250 is under procurement. Aerno 41-5300 has been superseded by Aerno 41-5200 but is not interchangeable with it.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers, brake drum and, if designated, fairing.

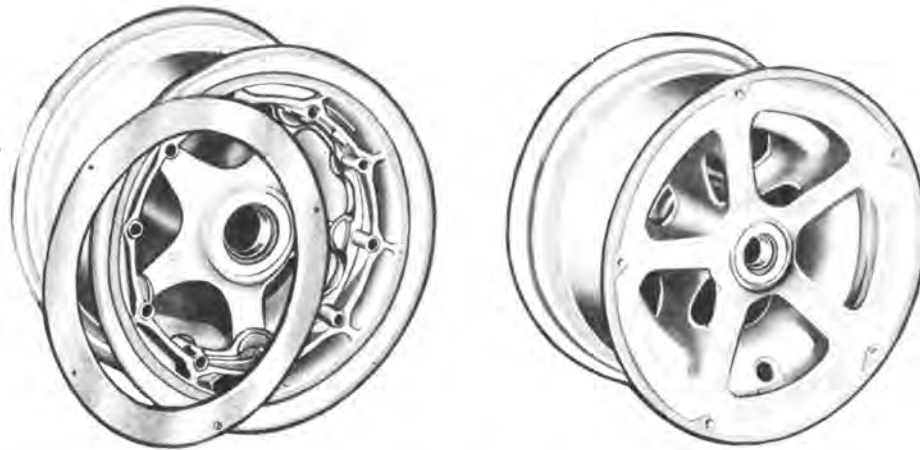
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

**ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 5
A—Army, N—Navy, B—British**

Manufacturer	Aerno	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	British Reference Number	Remarks
Hayes Industries Inc.	41-5300	G-3-81	G-3-81A	A-B	4111 G3-81A	127A/606	Aluminum
	41-5300	G-3-81	G-3-81M	A-B	4111 G3-81M	127A/606	Magnesium
	41-5300	G-3-81	G-3-81A-1	A	4111 G3-81A1		Aluminum less fairing
	41-5300	G-3-81	G-3-81M-1	A	4111 G3-81M1		Magnesium less fairing
	41-5250	G-3-73	G-3-73A-1	A-N-B	4111 G3-73A1	127A/656	Aluminum less fairing
	41-5250	G-3-73	G-3-73M-1	A-N-B	4111 G3-73M1	127A/656	Magnesium less fairing
	41-5250	G-3-73	G-3-73A	A-N-B	4111 G3-73A		Aluminum
	41-5250	G-3-73	G-3-73M	A-N-B	4111 G3-73M		Magnesium
	Unassigned	G-3-17	G-3-17	A	4111 G3-17		



**WHEEL ASSEMBLY—7.50-10 LOW PRESSURE LANDING
GOODYEAR 218264**

CHARACTERISTICS:

Rim type	drop center	Tire diameter	24 inches
Flange type	fixed	Flange diameter	11.625 inches
Brake cavity	one, for disc brake	Ledge diameter	10.000 inches
Axle type	stub	Overall width	7.00 inches
Axle diameter	inner: 1.500 inches outer: 1.000 inches	Weight	approximately 8.33 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—7.6 x .080/.070 x 6 disc, Goodyear Part No. 218262M	A. E. Reference Number—None
Casing—7.50-10 low pressure—6-ply	A. E. Reference Number 41-5202
Tube—7.50-10 low pressure	A. E. Reference Number 41-5303

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General AN-W-6

MANUFACTURER'S PART NUMBER: 218264M (magnesium)
218264M-1 (magnesium, less fairing)

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co. 218264

TYPE DESIGNATION: Type III

A. S. C. STOCK NUMBER: 4109 218264M and 4109 218264M1 (less fairing)

TECHNICAL ORDER NUMBER: AN 03-25D-1

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairing.

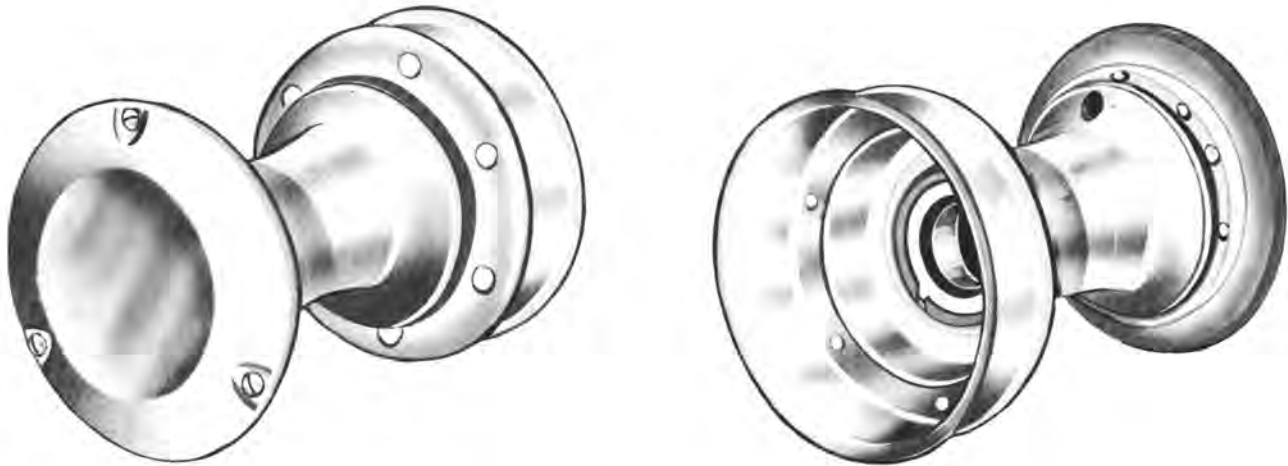
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/667 (with fairing)



WHEEL ASSEMBLY—8.00-4 LOW PRESSURE LANDING

HAYES D-3-13 D-3-14

DESCRIPTION: D-3-13 has the word "CUB" stamped on the fairing, otherwise both are identical.

CHARACTERISTICS:

Rim type.....drop center	Casing diameter ..17 inches
Flange type.....demountable	Flange diameter ..5.375 inches
Brake drum.....one, for expander tube brake	Ledge diameter...4.000 inches
Axle type.....straight	Overall width.....8.172 inches
Axle diameter.....1.250 inches	Weight.....approximately 3.75 pounds (aluminum)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—5 x 1 expander tube,	
Hayes part No. D-2-113.....	A. E. Reference Number—None
Casing—8.00-4 low pressure—4-ply.....	A. E. Reference Number 41-1043
Tube—8.00-4 low pressure.....	A. E. Reference Number 41-1044

ARMY

A. E. REFERENCE NUMBER: None (C. F. E.)

SPECIFICATIONS:

General.....AN-W-6

MANUFACTURER'S PART AND DRAWING NUMBER: Hayes Industries Inc. D-3-14 and D-3-13

TYPE DESIGNATION: Type III

A. S. C. STOCK NUMBER: 4111 D3-14 and 4111 D 3-13

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



**WHEEL ASSEMBLY—17.00-16 LOW PRESSURE LANDING
BENDIX 57386**

CHARACTERISTICS:

- | | |
|-------------------------------------------|--------------------------------------|
| Rim type..... flat base | Tire diameter.... 45 inches |
| Flange type..... demountable (split) | Flange diameter.. 18.750 inches |
| Brake drum..... two, for dual shoe brakes | Ledge diameter... 16.000 inches |
| Axle type..... straight | Overall width.... 18.687 inches |
| Axle diameter.... 3.000 inches | Weight..... approximately 104 pounds |

RELATIONSHIP OF PARTS: Used with:

- | | |
|---------------------------------------------------|--------------------------------|
| Brake assembly—14 x 3, Bendix Part No. 57584..... | A. E. Reference Number—None |
| Casing—17.00-16 low pressure—10-ply..... | A. E. Reference Number 41-1273 |
| Tube—17.00-16 low pressure..... | A. E. Reference Number 41-1274 |

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General..... AN-W-6

MANUFACTURER'S PART AND DRAWING NUMBER: Bendix Products Div. 57386

TYPE DESIGNATION: Type III

A. S. C. STOCK NUMBER: 4103 57386

TECHNICAL ORDER NUMBER: AN 03-25C-9

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, and grease retainers.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/655



WHEEL ASSEMBLY—19.00-23 LOW PRESSURE LANDING

HAYES H-3-38M

CHARACTERISTICS:

- Rim type.....drop center
- Flange type.....demountable
- Brake drum.....one, centrifuse, for expander tube brake
- Axle type.....stub
- Axle diameter.....inner: 4.000 inches
outer: 3.750 inches
- Tire diameter....55 inches
- Flange diameter...27.000 inches
- Ledge diameter...23.000 inches
- Overall width....19.531 inches
- Weight.....approximately 168.5 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

- Brake assembly—20 x 2 $\frac{3}{4}$ duplex expander tube.....A. E. Reference Number 41-7101
- Casing—19.00-23 low pressure—16-ply.....A. E. Reference Number 41-7103
- Tube—19.00-23 low pressure.....A. E. Reference Number 41-7104

ARMY

A. E. REFERENCE NUMBER: 41-7100

SPECIFICATIONS:

- General.....AN-W-6
- Superseded.....25258

TYPE DESIGNATION: Type III

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings, grease retainers and, if designated, fairing.

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

NAVY

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Current Models (X)	Remarks
Hayes Industries Inc.	H-3-38M	H-3-38M	A-N-B	4111 H3-38M	AN 03-25B-1	127A/615	X	Magnesium
	H-3-322	H-3-322A	A	4111 H3-322A				
	H-3-38M	H-3-38M-1	A-N-B	4111 H3-38M-1	AN 03-25B-1		X	Magnesium, less fairing.



WHEEL ASSEMBLY—27 SMOOTH CONTOUR LANDING

HAYES G-3-1A G-3-1A-1

CHARACTERISTICS:

Rim type drop center	Tire diameter 27 inches
Flange type fixed	Flange diameter 15.375 inches
Brake drum one, for shoe brake	Ledge diameter 14.000 inches
Axle type stub	Overall width 9.781 inches
Axle diameter inner: 2.000 inches	Weight 25 pounds (aluminum)
outer: 1.500 inches	

RELATIONSHIP OF PARTS: Used with:

Brake assembly—11 x 2 reversible hydraulic shoe	A. E. Reference Number 41-5751
Casing—27 smooth contour—8-ply	A. E. Reference Number 41-5603
Tube—27 smooth contour H. D.	A. E. Reference Number 41-5604

ARMY

A. E. REFERENCE NUMBER: 41-5750

SPECIFICATIONS:

General	AN-W-6
Superseded	25258

TYPE DESIGNATION: Type I

TECHNICAL ORDER NUMBER: 03-25B-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings, grease retainers and, if designated, fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

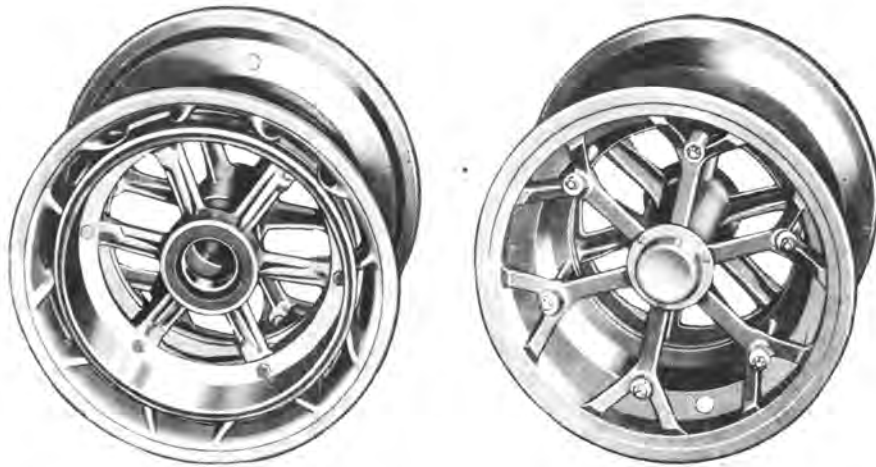
PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Aerno	Manu- facturer's Part and Drawing Number	Used By	Air Service Command Stock Number	British Reference Number	Current Models (X)	Remarks
Hayes Industries Inc.	41-5750	G-3-1A	A-N-B	4111 G3-1A	127A/607	X	Aluminum
	41-5750	G-3-1A-1	A-N-B	4111 G3-1A1	F	X	Aluminum, less fairing
	None	G-3-40	A	4111 G3-40			
Firestone Tire & Rubber Co.	41-5770	27-D-2	A-B	4107 27D-2	127A/711	X	Weight 56 pounds. Interchangeable if used in pairs.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—27 SMOOTH CONTOUR GLIDER FIRESTONE 27-D-2

DESCRIPTION: Comprised of two malleable iron castings, matched together at the center forming a closed tube between the bearings. The castings have two steel stampings spun over them forming the tire seat. These stampings are welded together before spinning, and are prevented from rotating by dimples in the stampings which fit into corresponding recesses in the castings.

CHARACTERISTICS:

- | | | | |
|-------------------------|---------------------|---------------------------|-------------------------|
| Rim type | drop center | Tire diameter | 27 inches |
| Flange type | fixed | Flange diameter | 15.375 inches |
| Brake drum | one, for shoe brake | Ledge diameter | 14.000 inches |
| Axle type | stub | Overall width | 9.676 inches |
| Axle diameter | inner: 2.000 inches | Weight | approximately 56 pounds |
| | outer: 1.500 inches | | |

RELATIONSHIP OF PARTS: Used with:

- | | |
|-----------------------------------------------------------|--------------------------------|
| Brake assembly—11 x 2 reversible hydraulic shoe | A. E. Reference Number 41-5751 |
| Casing—27 smooth contour—8-ply | A. E. Reference Number 41-5603 |
| Tube—27 smooth contour H. D. | A. E. Reference Number 41-5604 |

ARMY

A. E. REFERENCE NUMBER: 41-5770

SPECIFICATIONS:

- | | |
|----------------------|--------|
| General | AN-W-6 |
| Superseded | 25258 |

MANUFACTURER'S PART AND DRAWING NUMBER: Firestone Tire & Rubber Co. 27-D-2

TYPE DESIGNATION: Type I

TECHNICAL ORDER NUMBER: 03-25HA-2

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings and grease retainers.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Aerno	Manufacturer's Part and Drawing Number	Used By	Air Service Command Stock Number	British Reference Number	Remarks
Firestone Tire & Rubber Co.	41-5770	27-D-2	A-B	4107 27D-2	127A/711	Interchangeable if used in pairs.
Hayes Industries, Inc.	41-5750	G-3-1A	A-N-B	4111 G3-1A	127A/607	Interchangeable if used in pairs.
	41-5750	G-3-1A-1	A-N	4111 G3-1A1		Interchangeable if used in pairs.



WHEEL ASSEMBLY—27 SMOOTH CONTOUR LANDING

GOODYEAR 530441M

CHARACTERISTICS:

- | | | | |
|-------------------------|--------------------------------------------|---------------------------|-------------------------------------------|
| Rim type | drop center | Tire diameter | 27 inches |
| Flange type | fixed | Flange diameter | 15.375 inches |
| Brake cavity | one, for disc brake | Ledge diameter | 14.000 inches |
| Axle type | stub | Overall width | 9.750 inches |
| Axle diameter | inner: 2.000 inches
outer: 1.500 inches | Weight | approximately 21.05 pounds
(magnesium) |

RELATIONSHIP OF PARTS: Used with:

- Brake assembly—7.6 x .100/.125 x 9 H.P. disc A. E. Reference Number 41-5901
- Casing—27 smooth contour—8-ply A. E. Reference Number 41-5603
- Tube—27 smooth contour H.D. A. E. Reference Number 41-5604

ARMY

A. E. REFERENCE NUMBER: 41-5900

SPECIFICATIONS:

- General AN-W-6
- Superseded 25258

A. A. F. DRAWING NUMBER: S40H1019

MANUFACTURER'S PART AND DRAWING NUMBER: Goodyear Tire & Rubber Co. 530441M

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4109 530441M

TECHNICAL ORDER NUMBER: AN 03-25D-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/697



**WHEEL ASSEMBLY—30 SMOOTH CONTOUR LIGHT DUTY
LANDING**

HAYES H-3-44

CHARACTERISTICS:

Rim type.....drop center
Flange type.....fixed
Brake drum.....one, for shoe brake
Axle type.....stub
Axle diameter.....inner: 2.500 inches
outer: 2.000 inches

Tire diameter.....30 inches
Flange diameter ..16.750 inches
Ledge diameter...15.250 inches
Overall width....10.813 inches
Weight.....approximately 34 pounds
(aluminum)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—12 x 2¼ reversible hydraulic shoe...A. E. Reference Number 41-6201
Casing—30 smooth contour—8-ply.....A. E. Reference Number 41-6053
Tube—30 smooth contour.....A. E. Reference Number 41-6054

ARMY

A. E. REFERENCE NUMBER: 41-6200

SPECIFICATIONS:

General.....AN-W-6
Superseded.....25258

MANUFACTURER'S PART NUMBER: H-3-44A

MANUFACTURER'S DRAWING NUMBER: Hayes Industries Inc. H-3-44

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4111 H3-44A

TECHNICAL ORDER NUMBER: 03-25B-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings, grease retainers and fairing.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/604



WHEEL ASSEMBLY—33 SMOOTH CONTOUR LANDING

BENDIX 55902 57679 59180M-1

CHARACTERISTICS:

Rim type	drop center	Tire diameter	33 inches
Flange type	fixed	Flange diameter	18.125 inches
Brake drum	one, for shoe brake	Ledge diameter	16.500 inches
Axle type	stub	Overall width	11.938 inches
Axle diameter	inner: 3.000 inches outer: 2.500 inches	Weight	approximately 41.75 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—13 x 2½ duo-servo hydraulic shoe	A. E. Reference Number 41-6351
Casing—33 smooth contour—8-ply	A. E. Reference Number 41-6352
Tube—33 smooth contour	A. E. Reference Number 41-6353

ARMY

A. E. REFERENCE NUMBER: 41-6350

SPECIFICATIONS:

General	AN-W-6
Superseded	25258

TYPE DESIGNATION: Type I

TECHNICAL ORDER NUMBER: AN 03-25C-9

PRODUCTION STATUS: Only 59180M-1 is under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings and grease retainers. 55902 and 57679 were furnished with outboard fairing.

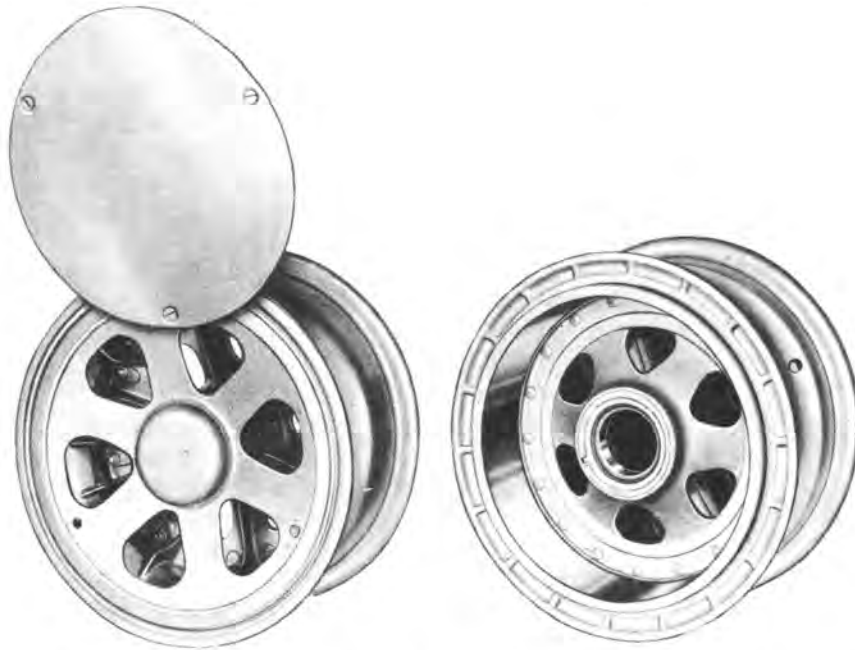
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	British References Number	Current Model (X)	Remarks
	59180M-1	59180	A-N-B	4103 59180M1	127A/718	X	Magnesium, less fairing.
	57679	57679	A-N-B	4103 57679	127A/672		Superseded by 59180M-1.
Bendix Products Div. of Bendix Aviation Corp.	55902	55902	A-B	4103 55902	127A/698		Superseded by 57679.
	56808	56808	A	4103 56808			
	57382	57382	A	4103 57382			
	52933	52933	A	4103 52933			



WHEEL ASSEMBLY—34 x 9 HIGH PRESSURE LANDING

BENDIX 57405M 57405M-1

CHARACTERISTICS:

- Rim type drop center
- Flange type demountable
- Brake drum one, for shoe brake
- Axle type stub
- Axle diameter inner: 3.000 inches
outer: 2.500 inches
- Tire diameter 34 inches
- Flange diameter 18.000 inches
- Ledge diameter 16.000 inches
- Overall width 10.875 inches
- Weight approximately 47.5 pounds
(magnesium)
46.9 pounds
(magnesium, less fairing)

RELATIONSHIP OF PARTS: Used with:

- Brake assembly—14 x 4 duo-servo hydraulic shoe A. E. Reference Number 41-6501
- Casing—34 x 9 high pressure—10-ply A. E. Reference Number 41-6503
- Tube—34 x 9 high pressure A. E. Reference Number 41-6504

ARMY

A. E. REFERENCE NUMBER: 41-6500

SPECIFICATIONS:

General AN-W-6

TYPE DESIGNATION: Type II

TECHNICAL ORDER NUMBER: AN 03-25C-9

PRODUCTION STATUS: Under procurement.

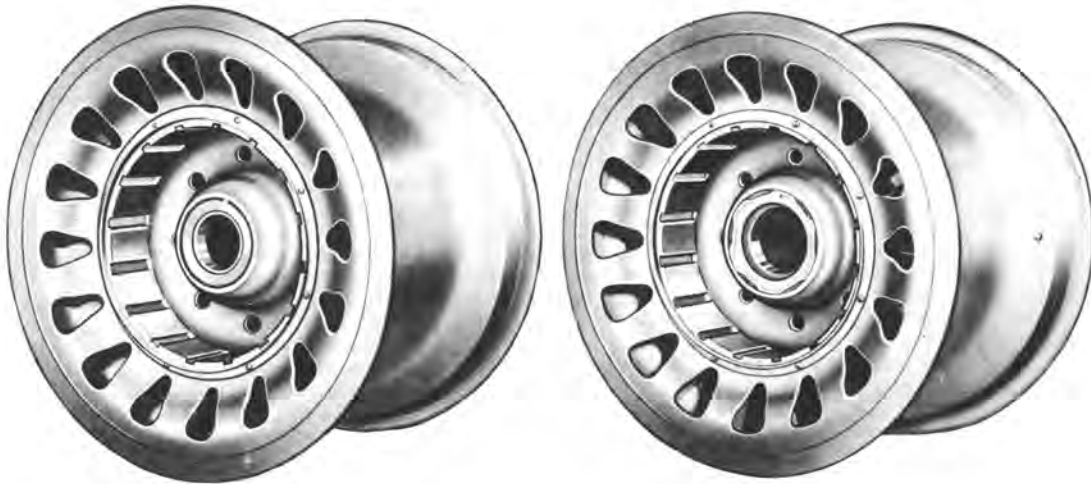
SHIPPING DATA: Shipped as a complete wheel assembly including brake drum, bearings, grease retainers and, if designated, fairing.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE
Models are used in services as noted in column 4
A—Army, N—Navy, B—British,

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	British Reference Number	Remarks
Bendix Products Div. of Bendix Aviation Co.p.	57405M	57405	A-B	4103 57405M		Magnesium
	57405M-1	59468	A-B	4103 57405M 1	127A/700	Magnesium, less fairing.



WHEEL ASSEMBLY—47 SMOOTH CONTOUR LANDING GOODYEAR 530005

CHARACTERISTICS:

Rim type	drop center	Tire diameter	47 inches
Flange type	fixed	Flange diameter	25.750 inches
Brake cavity	two, for disc brakes	Ledge diameter	23.500 inches
Axle type	stub	Overall width	17.500 inches
Axle diameter	inner: 3.750 inches outer: 3.000 inches	Weight	approximately 88.47 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—12.7 x .100/.125 x 14, H.P. disc	A. E. Reference Number 41-6901
Casing—47 smooth contour—12-ply	A. E. Reference Number 41-6903
Tube—47 smooth contour	A. E. Reference Number 41-6904

ARMY

A. E. REFERENCE NUMBER: 41-6900

SPECIFICATIONS:

General	AN-W-6
Superseded	25258

MANUFACTURER'S PART NUMBER: 530005A-1 (aluminum)
530005M-1 (magnesium)

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co. 530005

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4109 530005M1 (magnesium) and 4109 530005A1 (aluminum)

TECHNICAL ORDER NUMBER: AN 03-25D-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement for initial installation.

BRITISH

REFERENCE NUMBER: 127A/654



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—56 SMOOTH CONTOUR LANDING

HAYES H-3-101M

CHARACTERISTICS:

Rim type.....	flat base	Tire diameter....	56 inches
Flange type.....	demountable	Flange diameter..	29.750 inches
Brake drum.....	two, for expander tube brakes	Ledge diameter..	27.000 inches
Axle type.....	stub	Overall width....	21.719 inches
Axle diameter....	inner: 4.000 inches outer: 3.750 inches	Weight.....	approximately 277.5 pounds (magnesium)

RELATIONSHIP OF PARTS: Used with:

Brake assembly—20 x 2 $\frac{3}{4}$ expander tube, inboard....	A. E. Reference Number 41-7255
Brake assembly—20 x 2 $\frac{3}{4}$ expander tube, outboard....	A. E. Reference Number 41-7256
Casing—56 smooth contour—16-ply.....	A. E. Reference Number 41-7252
Tube—56 smooth contour (style D).....	A. E. Reference Number 41-7257

ARMY

A. E. REFERENCE NUMBER: 41-7250

SPECIFICATIONS:

General.....	AN-W-6
Superseded.....	25258

A. A. F. DRAWING NUMBER: S41M765

MANUFACTURER'S PART NUMBER: H-3-101M (magnesium) and H-3-101M-1 (magnesium, less fairing).

MANUFACTURER'S DRAWING NUMBER: Hayes Industries Inc. H-3-101M

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4111 H3-101M (magnesium) and 4111 H3-101M1 (magnesium, less fairing).

TECHNICAL ORDER NUMBER: 03-25B-1

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including brake drums, bearings, grease retainers and, if designated, fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/600 (magnesium) and 127A/720 (magnesium, less fairing.)



**WHEEL ASSEMBLY—5.00-4 LOW PRESSURE AUXILIARY
FIRESTONE 5C2M**

CHARACTERISTICS:

Rim typesplit	Tire diameter13.000 inches
Flange typefixed	Flange diameter5.500 inches
Axle typestraight	Ledge diameter4.000 inches
Axle diameter1.250 inches	Overall width4.890 inches*
	Weightapproximately 3 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—5.00-4 low pressure—6 ply	A. E. Reference Number 41-1002
Tube—5.00-4 low pressure	A. E. Reference Number 41-1003

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General98-25257

MANUFACTURER'S PART AND DRAWING NUMBER: Firestone Tire & Rubber Co., 5C2M

TYPE DESIGNATION: Type III

A. S. C. STOCK NUMBER: 4107 5C2M

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement for initial installation.



WHEELS
LANDING GEAR SECTION



WHEEL ASSEMBLY—8.00 SMOOTH CONTOUR TAIL

HAYES B-3-83A, B-3-83M GENERAL VGC-8-SC-100

CHARACTERISTICS:

Rim type drop center
Flange type . . . demountable
Axle type straight
Axle diameter . . .500 inch

Casing diameter . . .8.000 inches
Flange diameter . . .3.840 inches
Ledge diameter . . .2.870 inches
Overall width3.188 inches

Weight approximately 1.188 lbs. (aluminum)
.92 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—8.00 smooth contour—4-ply A. E. Reference Number 41-8851
Tube—8.00 smooth contour A. E. Reference Number 41-8852

ARMY

A. E. REFERENCE NUMBER: 41-8855

SPECIFICATIONS:

General applicable to 98-25272

A. A. F. DRAWING NUMBER: S45B18

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairing.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement for initial installation.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

Models are used in services as noted in column 3

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing and Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Hayes Industries, Inc.	B-3-83A	A-N	4111 B3-83A		
	B-3-83M	A-N	4111 B3-83M		
Firestone Tire & Rubber Co.	AO-200F	A-N	4107 AO200F	03-25HA-1	
Goodyear Tire & Rubber Co.	510625	A-N	4109 510625		
General Tire & Rubber Co.	VGC-8-SC-100	A-N	4129 VGC8SC100		127A/657



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—9.00-6 LOW PRESSURE TAIL

BENDIX 52058 FIRESTONE SO-200FM

CHARACTERISTICS:

Rim type	split flat base	Tire diameter	22 inches
Flange type	fixed	Flange diameter	7.250 inches (52058)
Axle type	straight		7.750 inches (SO-200FM)
Axle diameter	1.250 inches	Ledge diameter	6.000 inches
		Overall width	9.000 inches (52058)
			9.625 inches (SO-200FM)
		Weight	approximately 10 lbs. (52058)
			approximately 9 lbs. (SO-200FM)

RELATIONSHIP OF PARTS: Used with:

Casing—9.00-6 low pressure—8-ply	A. E. Reference Number 41-1062
Tube—9.00-6 low pressure	A. E. Reference Number 41-1063

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General 98-25257

TYPE DESIGNATION: Type III

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

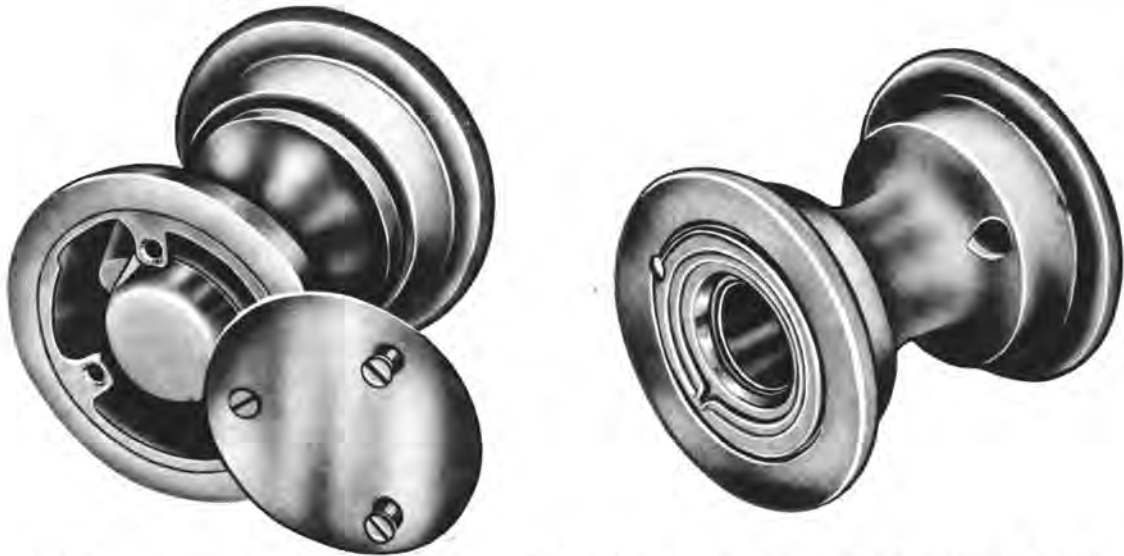
Models are used in services as noted in column 3

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing and Part Number	Used By	Air Service Command Stock Number	British Reference Number
Bendix Products Div.	52058	A-B-N	4103 52058	127A/679
Firestone Tire & Rubber Co.	SO-200FM	A-B-N	4107 SO200FM	127A/728



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—10.00 SMOOTH CONTOUR TAIL

GOODYEAR 217466 HAYES B-3-28 BENDIX 55612 GENERAL VGM-10 FIRESTONE BO-200

CHARACTERISTICS:

Rim type drop center	Tire diameter 10 inches
Flange type . . . demountable	Flange diameter . . . 4.093 inches
Axle type stub	Ledge diameter . . . 3.188 inches
Axle diameter . inner: 1.250 inches	Overall width 4.300 inches
outer: .625 inch	Weight approximately 2 lbs. (aluminum)

RELATIONSHIP OF PARTS: Used with:

Casing—10.00 smooth contour—6-ply	A. E. Reference Number 41-9002
or	
Casing—10.00 smooth contour— 6-ply (channel tread)	A. E. Reference Number 41-9004
Tube—10.00 smooth contour	A. E. Reference Number 41-9003

ARMY

A. E. REFERENCE NUMBER: 41-9000

SPECIFICATIONS:

General 98-25272

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

Models are used in services as noted in column 4

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Goodyear Tire & Rubber Co.	217466	217466	A-N-B	4109 217466M	03-25D-7	127A/671
Hayes Industries, Inc.	B-3-28	B-3-28A	A-N-B	4111 B3-28A	03-25A-3	127A/619
	B-3-28	B-3-28M	A-N-B	4111 B3-28M	03-25A-3	127A/619
Bendix Products Div.	55612	55612	A-N-B	4103 55612	03-25A-9	127A/662
General Tire & Rubber Co.	VGM-10	VGM-10	A-N-B	4129 VGM 10		127A/658
Firestone Tire & Rubber Co.	BO-200	BO-200	A	4107 B0200		



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—10.00-7 LOW PRESSURE TAIL HAYES D-3-21, D-3-21-1

CHARACTERISTICS:

Rim type.....drop center
Flange type....demountable
Axle type.....straight
Axle diameter..1.500 inches

Tire diameter.....24 inches
Flange diameter...9.500 inches
Ledge diameter...7.000 inches
Overall width.....9.563 inches
Weight.....17 lbs. (aluminum) .
16.5 lbs. (aluminum, less fairings)

RELATIONSHIP OF PARTS: Used with:

Casing—10.00-7 low pressure—10-ply.....A. E. Reference Number 41-9751
Tube—10.00-7 low pressure.....A. E. Reference Number 41-9752

ARMY

A. E. REFERENCE NUMBER: 41-9750

SPECIFICATIONS:

General.....applicable to 98-25272

A. A. F. DRAWING NUMBER: S44B21122

MANUFACTURER'S PART AND DRAWING NUMBER: Hayes Industries, Inc. D-3-21 (aluminum);
D-3-21-1 (aluminum, less fairings)

TYPE DESIGNATION: Type III

A. S. C. STOCK NUMBER: 4111 D3-21 (aluminum). 4111 D3-21-1 (aluminum, less fairings).

TECHNICAL ORDER NUMBER: AN 03-25B-13

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairings.

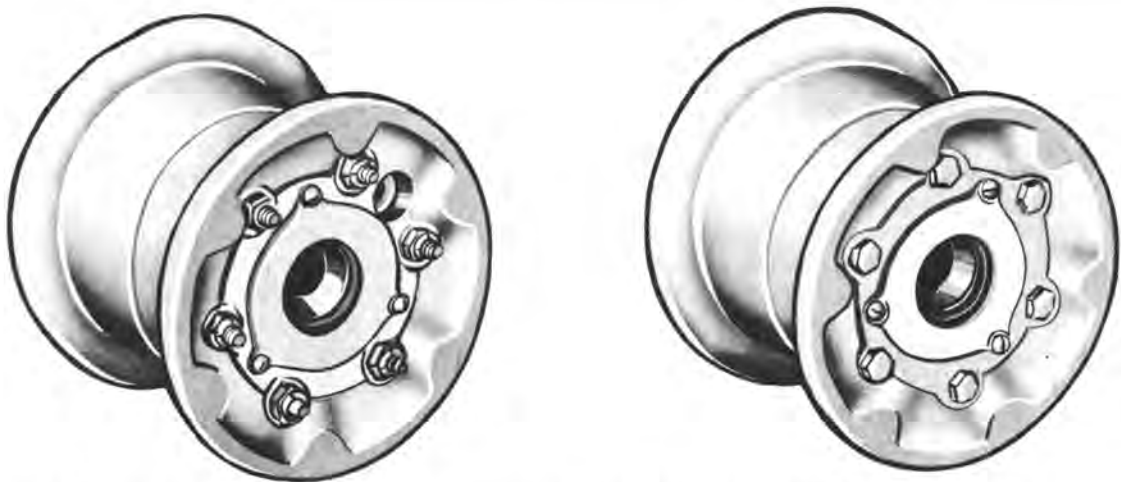
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—10½ x 4 EXTRA HIGH PRESSURE TAIL

HAYES D-3-285M-1 FIRESTONE QO-200F, QO-200FM GOODYEAR 511482M GENERAL 203-A-919A-1

FORMER NAMES: Wheel assembly—10½ x 4 channel tread tail.
Wheel assembly—10½ x 4 high pressure tail.

CHARACTERISTICS:

Rim type split flat base	Tire diameter 10.500 inches
Flange type fixed	Flange diameter 5.125 inches
Axle type straight	Ledge diameter 4.000 inches
Axle diameter 1.000 inch	Overall width 4.500 inches
	Weight approximately 3.4 lbs. (magnesium) approximately 4.3 lbs. (aluminum)

RELATIONSHIP OF PARTS: Used with:

Casing—10½ x 4 E.H.P.—6-ply channel tread A. E. Reference Number 41-9051
or
Casing—10½ x 4 E.H.P.—6-ply plain tread Unassigned
Tube—10½ x 4 E.H.P. A. E. Reference Number 41-9052

ARMY

A. E. REFERENCE NUMBER: 41-9050

SPECIFICATIONS:

General applicable to 98-25272

A. A. F. DRAWING NUMBER: 43J2832

TYPE DESIGNATION: Type VII

PRODUCTION STATUS: Not under procurement for initial installation.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairings.

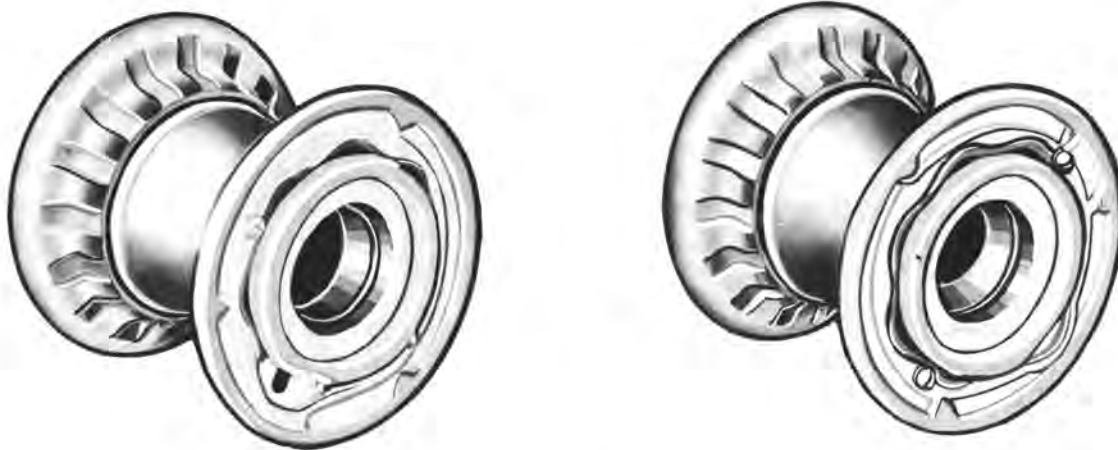
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 3
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing and Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number
Firestone Tire & Rubber Co.	QO-200F	A-N	4107 QO200F	
	QO-200FM	A-N	4107 QO200FM	
General Tire & Rubber Co.	203-A-919A-1	A-N	4129 203A919A1	
Goodyear Tire & Rubber Co.	511482M	A-N	4109 511482M	
Hayes Industries, Inc.	D-3-285M-1	A-N	4111 D3-285M1	03-25B-10



WHEEL ASSEMBLY—12 x 5-3 EXTRA LOW PRESSURE TAIL
GOODYEAR 530054

CHARACTERISTICS:

- | | |
|--------------------------------------|------------------------------------------|
| Rim type flat base | Tire diameter 12 inches |
| Flange type demountable | Flange diameter 4.680 inches |
| Axle straight | Ledge diameter 3.000 inches |
| Axle diameter 1.500 inches | Overall width 4.500 inches |
| | Weight approximately 3.50 lbs. |

RELATIONSHIP OF PARTS: Used with:

- Casing—12 x 5-3 extra low pressure—4-ply A. E. Reference Number 41-1212
- Tube—12 x 5-3 extra low pressure A. E. Reference Number 41-1213

ARMY

A. E. REFERENCE NUMBER: None (C.F.E.)

SPECIFICATIONS:

General applicable to 98-25272

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co. 530054

TYPE DESIGNATION: Type IV

A. S. C. STOCK NUMBER: 4109 530054

TECHNICAL ORDER NUMBER: 03-25A-7

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

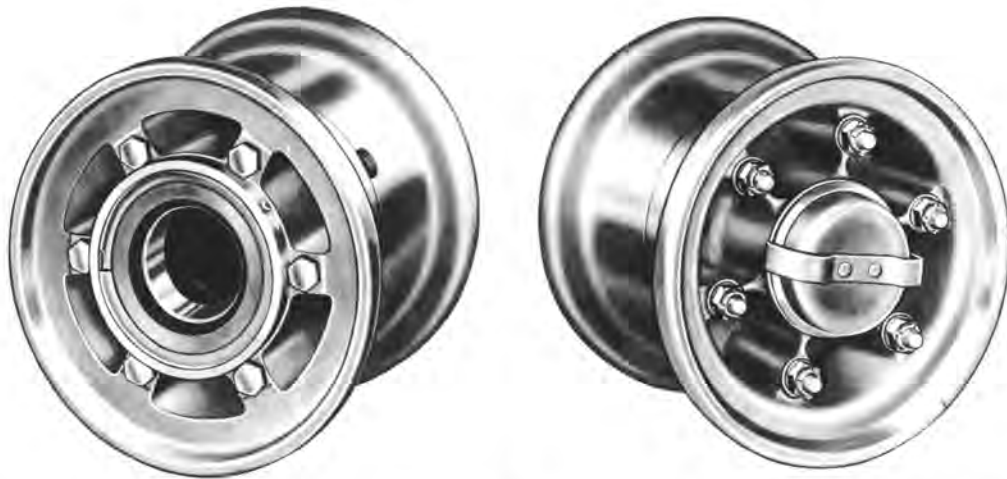
PROCUREMENT STATUS: Under procurement.

BRITISH

REFERENCE NUMBER: 127A/631



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—12½ x 4½ HIGH PRESSURE TAIL

HAYES D-3-292-1 FIRESTONE JO-200-1, JO-200M-1

FORMER NAME: Wheel assembly—12½ x 4½-4½ channel tread tail

CHARACTERISTICS:

Rim type	split	Tire diameter	12.500 inches
Flange type	fixed	Ledge diameter	4.500 inches
Axle type	stub	Flange diameter	5.750 inches
Axle diameter, inner:	1.500 inches	Overall width	5.000 inches
outer:	1.000 inches	Weight JO-200	approximately 5.5 lbs. (aluminum) 4 lbs. (magnesium)
		Weight D-3-292	approximately 4.75 lbs. (aluminum) 3.4 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

- Casing—12½ x 4½ high pressure—8-ply A. E. Reference Number 41-9186
- Tube—12½ x 4½ high pressure A. E. Reference Number 41-9187

ARMY

A. E. REFERENCE NUMBER: 41-9185

SPECIFICATIONS:

General applicable to 98-25272

A. A. F. DRAWING NUMBER: S43G1497

TYPE DESIGNATION: Type II

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

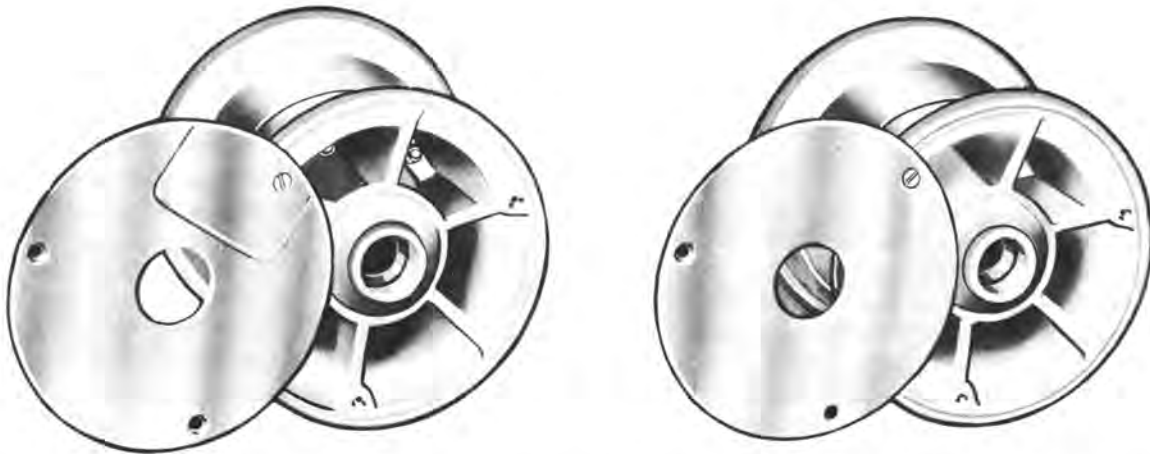
Models are used in services as noted in column 4

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Firestone Tire & Rubber Co.	JO-200-1	JO 200-1	A-B	4107 JO200-1		127A/687	Aluminum
	JO 200M-1	JO 200M-1	A-B	4107 JO200M1		127A/687	Magnesium
Hayes Industries, Inc.	D-3-292-1	D-3-292-A-1	A-B	4111 D3-292A1	03-25B-10	127A/708	Aluminum
	D-3-292-1	D-3-292-M-1	A-B	4111 D3-292M1	03-25B-10	127A/708	Magnesium



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—12½ x 4½ EXTRA HIGH PRESSURE TAIL

FIRESTONE JO-200FM HAYES D-3-275X-1 GENERAL 203-A-867

FORMER NAMES: Wheel assembly—12½ x 4½-4½ channel tread tail
Wheel assembly—12½ x 4½ high pressure tail

CHARACTERISTICS:

Rim type	split	Tire diameter	12.500 inches
Flange type	fixed	Flange diameter	5.750 inches
Axle type	straight	Ledge diameter	4.500 inches
Axle diameter	1.000 inch	Overall width	5.000 inches
		Weight	see chart

RELATIONSHIP OF PARTS: Used with:

Casing—12½ x 4½ extra high pressure	
channel tread—8-ply H.D.	A. E. Reference Number 41-9186
Tube—12½ x 4½ extra high pressure	A. E. Reference Number 41-9187

ARMY

A. E. REFERENCE NUMBER: 41-9190

SPECIFICATIONS:

General 98-25272

A. A. F. DRAWING NUMBER: S44G21072

TYPE DESIGNATION: Type VII

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	Weight	Remarks
Firestone Tire & Rubber Co.	JO200FM-2	JO200FM-2	A-N	4107 JO200FM2		4.82 lbs.	Magnesium.
	JO200FM-3	JO200FM-3	A	4107 JO200FM3		3.8 lbs.	Magnesium.
Goodyear Tire & Rubber Co.	511350	511350-A	A	4109 511350A		Approx. 4.74 lbs.	Aluminum.
	511350	511350-M	A-N	4109 511350M		Approx. 3.68 lbs.	Magnesium.
General Tire & Rubber Co.	203-A-867	203-A-867	A	4129 203A867		Approx. 3.25 lbs.	Magnesium.
Hayes Industries, Inc.	D-3-275-X-1	D-3-275-X-M-1	A-N	4111 D3-275XM1	03-258-10	5 lbs.	Magnesium sand casting
	D-3-275-X-1	D-3-275XD-1	A-N	4111 D3-275XD1	03-258-10		Magnesium die casting.
Bendix Products Div.	59370	59370-M	A	4103 59370M		Approx. 3.6 lbs.	Magnesium.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—14.50 SMOOTH CONTOUR TAIL

BENDIX 57457 FIRESTONE EO-200A, EO-200M HAYES B-3-69 GENERAL 203-A-807

CHARACTERISTICS:

Rim type.....drop center	Tire diameter.....14.5 inches
Flange type....demountable	Flange diameter....5.969 inches
Axle type.....stub	Ledge diameter....4.688 inches
Axle diameter...inner: 1.750 inches	Overall width.....6.340 inches
outer: 1.500 inches	Weight.....approximately 4.75 lbs. (aluminum)
	3.5 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—14.50 smooth contour—6-ply.....	A. E. Reference Number 41-9302
or	
Casing—14.50 smooth contour—6-ply channel tread...	A. E. Reference Number 41-9304
Tube—14.50 smooth contour.....	A. E. Reference Number 41-9303

ARMY

A. E. REFERENCE NUMBER: 41-9300

SPECIFICATIONS:

General.....98-25272

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

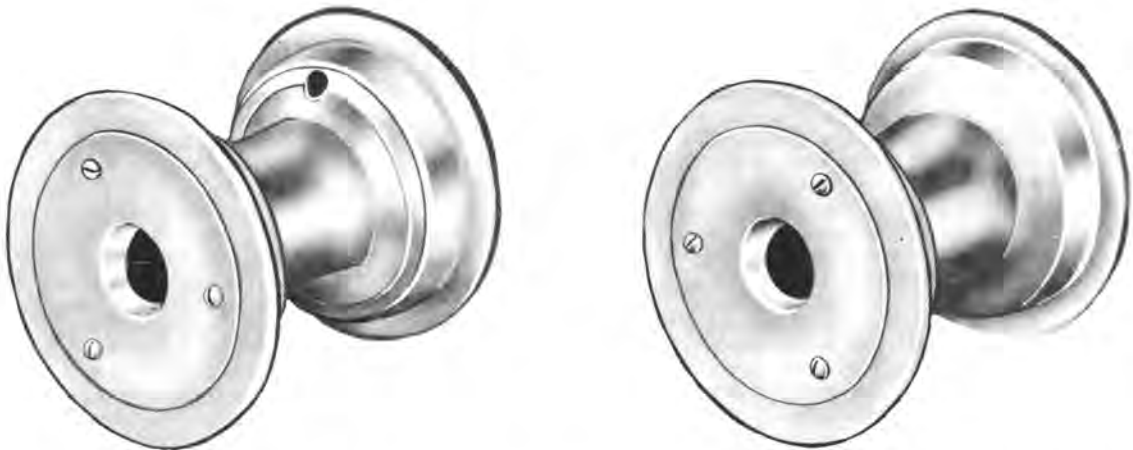
PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Bendix Products Div.	57457	57457	A-B-N	4103 57457		127A/626
Hayes Industries, Inc.	B-3-69	B-3-69A	A-B	4111 B3-69A	03-25A-3	127A/618
	B-3-69	B-3-69M	A-B	4111 B3-69M	03-25A-3	127A/618
Firestone Tire & Rubber Co.	EO-200A	EO-200A	A-B	4107 EO200A	03-25HA-1	127A/688
	EO-200M	EO-200M	A-B	4107 EO200M	03-25HA-1	127A/688
General Tire & Rubber Co.	203-A-807	203-A-807A	A	4129 203A807A		
	203-A-807	203-A-807M	A	4129 203A807M		



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBY—14.50 SMOOTH CONTOUR TAIL HAYES B-3-74

CHARACTERISTICS:

Rim type drop center
 Flange type . . . demountable
 Axle straight
 Axle diameter . . 1.250 inches

Tire diameter 14.500 inches
 Flange diameter . . . 5.969 inches
 Ledge diameter . . . 4.682 inches
 Overall width 6.320 inches
 Weight 3.5 lbs. (magnesium)
 4.75 lbs. (aluminum)

RELATIONSHIP OF PARTS: Used with:

Casing—14.50 smooth contour—6 ply A. E. Reference Number 41-9302
 or
 Casing—14.50 smooth contour—6-ply channel tread . . A. E. Reference Number 41-9304
 Tube—14.50 smooth contour A. E. Reference Number 41-9303

ARMY

A. E. REFERENCE NUMBER: 41-9305

SPECIFICATIONS:

General applicable to 98-25272

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, and if designated, fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks
Hayes Industries, Inc.	B-3-74	B-3-74A	A-B-N	4111 B3-74A	03-25A-3	127A/616	Aluminum.
	B-3-74	B-3-74M	A-B-N	4111 B3-74M	03-25A-3	127A/616	Magnesium.
Firestone Tire & Rubber Co.	EO200FA	EO200FA	A	4107 EO200FA			Aluminum.
	EO200FA	EO200FA-1	A	4107 EO200FA1			Aluminum, less fairings.
	EO200M	EO200M	A	4107 EO200M			Magnesium.
	EO200M	EO200M-1	A	4107 EO200M1			Magnesium, less fairings.
General Tire & Rubber Co.	204-A-17	204-A-17A	A	4129 204A17A			Aluminum.
	204-A-17	204-A-17A-1	A	4129 204A17A1			Aluminum, less fairings.
	204-A-17	204-A-17M	A	4129 204A17M			Magnesium.
	204-A-17	204-A-17M-1	A	4129 204A17M1			Magnesium, less fairings.



**WHEEL ASSEMBLY—17.00 SMOOTH CONTOUR TAIL
HAYES D-3-71**

CHARACTERISTICS:

Rim type	drop center	Tire diameter	17 inches
Flange type	demountable	Flange diameter	6.781 inches
Axle type	stub	Ledge diameter	5.438 inches
Axle diameter	inner: 2.000 inches	Overall width	7.340 inches
	outer: 1.750 inches	Weight	6.625 lbs. (aluminum)
			4.688 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—17.00 smooth contour—8-ply	A. E. Reference Number 41-9453
Tube—17.00 smooth contour	A. E. Reference Number 41-9452

ARMY

A. E. REFERENCE NUMBER: 41-9450

SPECIFICATIONS:

General 98-25272

MANUFACTURER'S PART NUMBER: D-3-71A (aluminum)
D-3-71M (magnesium)

MANUFACTURER'S DRAWING NUMBER: Hayes Industries, Inc. D-3-71

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4111 D-3-71A (aluminum). 4111 D-3-71M (magnesium)

TECHNICAL ORDER NUMBER: 03-25A-3

PRODUCTION STATUS: Not under procurement for initial installation.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

INTERCHANGEABILITY: Interchangeable with General Tire & Rubber Co. 203-A-799.

NAVY

PROCUREMENT STATUS: No procurement.

BRITISH

REFERENCE NUMBER: 127A/642



WHEEL ASSEMBLY—19.00 SMOOTH CONTOUR NOSE

HAYES D-3-9A, D-3-9M

CHARACTERISTICS:

- | | |
|--------------------------------|-------------------------------------------------------|
| Rim type drop center | Tire diameter 19 inches |
| Flange type . . . demountable | Flange diameter . . . 7.500 inches |
| Axle type straight | Ledge diameter . . . 6.000 inches |
| Axle diameter . . 1.250 inches | Overall width 8.200 inches |
| | Weight approximately 10.875 lbs. (aluminum) |

RELATIONSHIP OF PARTS: Used with:

- Casing—19.00 smooth contour—6-ply A. E. Reference Number 41-7451
- Tube—19.00 dual seal SCA A. E. Reference Number 41-7452

ARMY

A. E. REFERENCE NUMBER: 41-7450

SPECIFICATIONS:

- General 98-25272
- Superseded 25258

MANUFACTURER'S PART AND DRAWING NUMBER:

Hayes Industries, Inc. D-3-9A (aluminum). D-3-9M (magnesium)

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4111 D3-9A (aluminum). 4111 D3-9M (magnesium)

TECHNICAL ORDER NUMBER: 03-25A-3

PRODUCTION STATUS: Not under procurement for initial installation.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

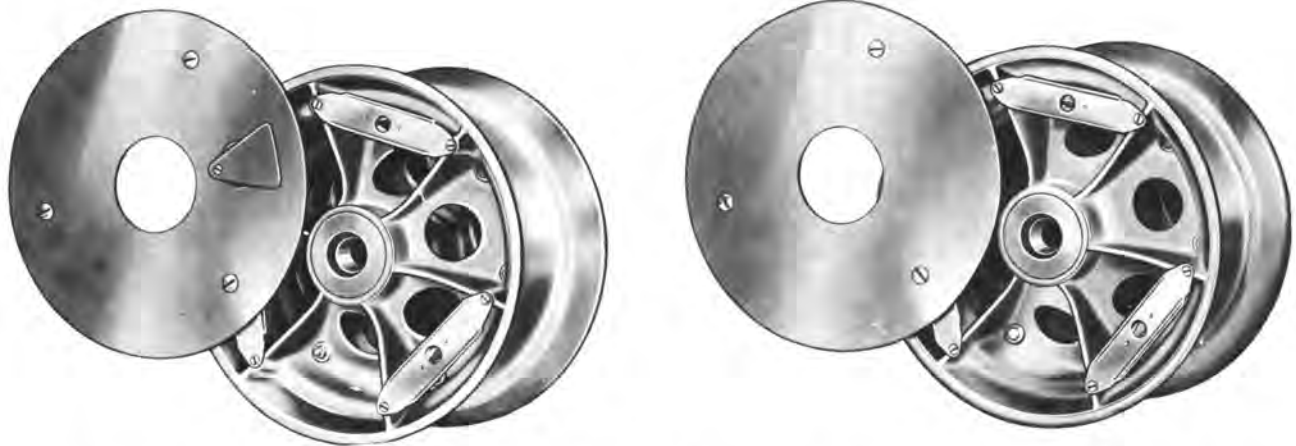
NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement as contractor furnished equipment.

BRITISH

REFERENCE NUMBER: 127A/611



**WHEEL ASSEMBLY—19 x 6.80-10 LOW PROFILE NOSE
FIRESTONE HO-200F, HO-200FM**

CHARACTERISTICS:

Rim type split
Flange type . . . fixed
Axle type straight
Axle diameter . . 1.250 inches

Tire diameter 19 inches
Ledge diameter . . . 10.000 inches
Flange diameter . . . 12.812 inches
Overall width 8.000 inches
Weight approximately 22 lbs. (aluminum)
16.6 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—19 x 6.80-10 low profile—6-ply A. E. Reference Number 41-7501
Tube—19 x 6.80-10 low profile A. E. Reference Number 41-7502

ARMY

A. E. REFERENCE NUMBER: 41-7500

SPECIFICATIONS:

General applicable to 98-25272

A. A. F. DRAWING NUMBER: S43J2831

MANUFACTURER'S PART AND DRAWING NUMBER:

Firestone Tire & Rubber Co. HO-200F (aluminum); HO-200FM (magnesium).

TYPE DESIGNATION: Type VI

A. S. C. STOCK NUMBER: 4107 H0200F (aluminum); 4107 H0200FM (magnesium).

TECHNICAL ORDER NUMBER: AN 03-25HA-5

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

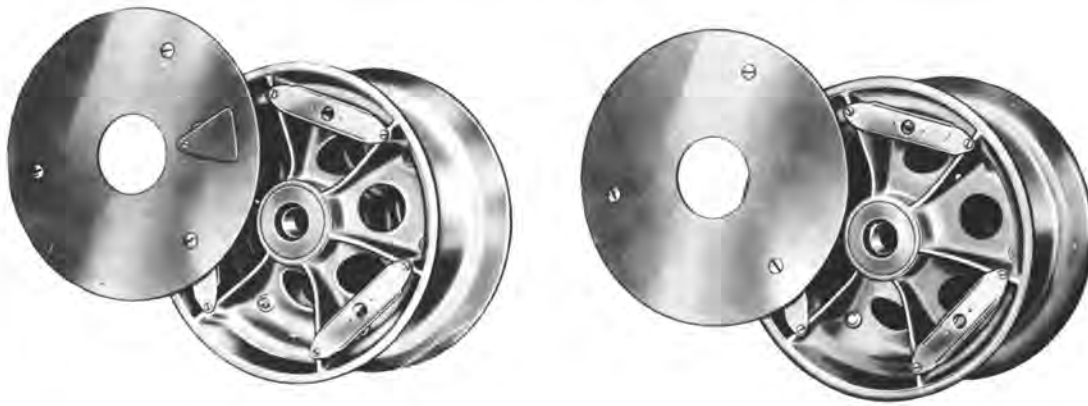
PROCUREMENT STATUS: Under procurement as contractor furnished equipment.

BRITISH

REFERENCE NUMBER: 127A/689



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—22 x 7.25-11.50 LOW PROFILE NOSE

FIRESTONE IO-200F, IO-200FM, IO-200F-1, IO-200FM-1

CHARACTERISTICS:

- Rim type split
- Flange type fixed
- Axle type straight
- Axle diameter . . 1.250 inches
- Tire diameter 22 inches
- Flange diameter . . . 13.938 inches
- Ledge diameter . . . 11.500 inches
- Overall width 8.250 inches
- Weight see chart

RELATIONSHIP OF PARTS: Used with:

- Casing 22.00 x 7.25-11.50—6-ply A. E. Reference Number 41-7601
- Tube 22.00 x 7.25-11.50 low profile A. E. Reference Number 41-7602

ARMY

A. E. REFERENCE NUMBER: 41-7600

SPECIFICATIONS:

General applicable to 98-25272

A. A. F. DRAWING NUMBER: S43J2598

TYPE DESIGNATION: Type VI

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including grease retainers, bearings, and, if designated, fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Not under procurement for initial installation.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

Models are used in services as noted in column 3

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Approximate Weight	Remarks
Firestone Tire & Rubber Co.	IO-200F	A-B-N	4107 IO200F	AN 03-25HA-5	127A/690	25 lbs.	Aluminum.
	IO-200F-1	A-B	4107 IO200F1	AN 03-25HA-5		22.75 lbs.	Aluminum, less fairings.
	IO-200FM	A-B	4107 IO200FM	03-25HA-1	127A/690	18.5 lbs.	Magnesium.
	IO-200FM-1	A-B	4107 IO200FM1	03-25HA-1		16.25 lbs.	Magnesium, less fairings.
Bendix Products Div.	58076	A	4103 58076				Magnesium.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—26.00 SMOOTH CONTOUR TAIL

HAYES G-3-217, G-3-168 FIRESTONE KO-200-195

CHARACTERISTICS:

Rim type drop center
 Flange type . . . demountable
 Axle type stub
 Axle diameter . inner: 3.000 inches
 outer: 2.500 inches

Tire diameter 26 inches
 Flange diameter . . . 10.500 inches
 Ledge diameter 8.250 inches
 Overall width 11.200 inches
 Weight approximately 19.25 lbs. (aluminum permanent mold)

RELATIONSHIP OF PARTS: Used with:

Casing—26.00 smooth contour—10-ply A. E. Reference Number 41-7952
 Tube—26.000 smooth contour A. E. Reference Number 41-7954

ARMY

A. E. REFERENCE NUMBER: 41-9800

SPECIFICATIONS:

General 98-25272

MANUFACTURER'S DRAWING NUMBER: Hayes Industries, Inc., G-3-217.

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairings.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Remarks	
Hayes Industries, Inc.	G-3-217	G-3-217A	A-B	4111 G3-217A	03-25A-3	127A/680	Aluminum sand casting.	
	G-3-217	G-3-217A-1	A	4111 G3-217A1	03-25A-3		Aluminum, less fairings, sand casting.	
	G-3-217	G-3-217A. P.	A-B	4111 G3-217AP	03-25A-3	127A/680	Aluminum, permanent mold.	
	G-3-217	G-3-217A. P-1	A	4111 G3-217AP1	03-25A-3		Aluminum, less fairings, permanent mold.	
	G-3-217	G-3-217M	A-B	4111 G3-217M	03-25A-3	127A/680	Magnesium sand casting.	
	G-3-217	G-3-217M-1	A	4111 G3-217M1	03-25A-3		Magnesium, less fairings, sand casting.	
	G-3-168	G-3-168A	A	4111 G3-168A	03-25A-3		Aluminum.	
	G-3-168	G-3-168M	A	4111 G3-168M			Magnesium.	
	Firestone Tire & Rubber Co.	KO200M-1	KO200M-1	A	4107 KO200M1	03-25HA-1		Magnesium.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—27 SMOOTH CONTOUR NOSE BENDIX 57609

CHARACTERISTICS:

Rim type.....drop center	Tire diameter.....27 inches
Flange type....fixed	Flange diameter....15.375 inches
Axle type.....stub	Ledge diameter....14.000 inches
Axle diameter inner: 2.000 inches	Overall width.....9.750 inches
outer: 1.500 inches	Weight.....see chart

RELATIONSHIP OF PARTS: Used with:

Casing—27 smooth contour—8-ply.....	A. E. Reference Number 41-5603
Tube—27 dual seal SCB.....	A. E. Reference Number 41-8101

ARMY

A. E. REFERENCE NUMBER: 41-8100

SPECIFICATIONS:

General.....	AN-W-6
Superseded.....	25258

MANUFACTURER'S DRAWING NUMBER: Bendix Products 57609

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairings.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Approximate Weight	Remarks
Bendix Products Div. of Bendix Aviation Corp.	57609M-2	59551	A	4103 59551	AN-03-25C-9		13.9 lbs.	Magnesium, less both fair- ings.
	57609M	59238	A-B	4103 59238	AN-03-25C-9	127A/696	15.1 lbs.	Magnesium.
	57609PA-2	59550	A	4103 59550	03-25C-6		19.3 lbs.	Aluminum, less both fair- ings.
	57609PA-3	57599	A	4103 57599	03-25C-6		19.9 lbs.	Aluminum, less inboard fairing.
	57609PA	57609	A-B	4103 57609	03-25C-6	127A/696	20.5 lbs.	Aluminum.
	57599	57599	A	4103 57599	03-25C-6			
	57194	57194	A-B	4103 57194		127A/648		Magnesium with 57197 wheel and bearing cup assembly.
	57410	57410	A	4103 57410				Same as 57341, less in- board fairing.
	57341	57341	A	4103 57341				Same as 57194, except No. 57344 wheel and bearing cup assembly.
	57000PA	57000	A	4103 57000	AN-03-25C-9			These are main landing wheels and can be sub- stituted for 57609, but the substitution cannot be made the other way.
	57351	57351	A	4103 57351				
	57224	57224	A	4103 57224				
	57291	57291	A	4103 57291				
	57347	57347	A	4103 57347				
Hayes Industries, Inc.	G-3-1A	G-3-1A	A-B	4111 G3-1A	03-25B-1			
	G-3-40	G-3-40M	A	4111 G3-40M	03-25B-1			
	G-3-387	G-3-387-M-1	A	4111 G3-387M1			18.5 lbs.	Magnesium.



WHEEL ASSEMBLY—27 SMOOTH CONTOUR NOSE
BENDIX 59447

CHARACTERISTICS:

Rim type drop center
Flange type fixed
Axle type stub
Axle diameter . . inner: 2.000 inches
 outer: 1.500 inches

Casing diameter 27 inches
Flange diameter 15.375 inches
Ledge diameter 14.000 inches
Overall width 9.750 inches
Weight approximately 20 lbs. (magnesium)

RELATIONSHIP OF PARTS: Used with:

Casing—27 smooth contour—8-ply A. E. Reference Number 41-5603
Tube—27 dual seal SCB A. E. Reference Number 41-8101

ARMY

A. E. REFERENCE NUMBER: None (C. F. E.)

SPECIFICATIONS:

General: applicable to 98-25272

MANUFACTURER'S PART AND DRAWING NUMBER: Bendix Products 59447

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4103 59447

TECHNICAL ORDER NUMBER: AN03-25C-9

PRODUCTION STATUS: Under procurement as contractor furnished equipment.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers, and fairings.

NAVY

PROCUREMENT STATUS: No procurement.



WHEEL ASSEMBLY—33 SMOOTH CONTOUR NOSE

BENDIX 57608

CHARACTERISTICS:

- Rim type drop center
- Flange type fixed
- Axle type stub
- Axle diameter . . inner: 3.000 inches
 outer: 2.500 inches
- Tire diameter 33 inches
- Flange diameter . . . 18.125 inches
- Ledge diameter 16.500 inches
- Overall width 11.750 inches
- Weight approximately 29 lbs. (aluminum)

RELATIONSHIP OF PARTS: Used with:

- Casing—33 smooth contour—8-ply A. E. Reference Number 41-6352
- Tube—33 SCB dual seal A. E. Reference Number 41-8401

ARMY

A. E. REFERENCE NUMBER: 41-8400

SPECIFICATIONS:

- General applicable to AN-W-6
- Superseded 25258

TYPE DESIGNATION: Type I

INTRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers, and, if designated, fairings.

NAVY

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: Under procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number	Current Model (X)	Remarks
	57608PA	57614	A-B	4103 57614	03-25C-6	127A/669	X	Aluminum.
	57608PA-3	57608	A-B	4103 57608	03-25C-6		X	Aluminum, less inboard fairing.
	57608M-2	59239	A-B-N	4103 59239	AN03-25C-9		X	Magnesium, less both fairings.
	57415	57415	A	4103 57415	03-25C-6			
	57383	57383	A	4103 57383	03-25C-6			
	56938	56938	A	4103 56938	03-25C-6			
Bendix Products Div. of Bendix Aviation Corp.	57384	57384	A	4103 57384	03-25C-6			These are main landing wheels and can be substituted for 57608, but the substitution cannot be made the other way.
	59239	59239	A	4103 59239	03-25C-6			
	56808	56808	A	4103 56808	03-25C-6			
	55902	55902	A	4103 55902	03-25C-6			
	57382	57382	A	4103 57382	03-25C-6			
	52933	52933	A	4103 52933	03-25C-6			
	57679	57679	A-B	4103 57679	03-25C-6	127A/672		This wheel has an outboard fairing with a hole in it because it was adapted to a fork axle.



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—36 SMOOTH CONTOUR NOSE

GOODYEAR 530033

DESCRIPTION: Actually designed as a main landing wheel but is used without a brake drum as a nose wheel.

CHARACTERISTICS:

Rim type.....	drop center	Tire diameter.....	36 inches
Flange type.....	fixed	Flange diameter.....	19.500 inches
Axle type.....	stub	Ledge diameter.....	17.750 inches
Axle diameter, inner:	3.000 inches	Overall width.....	13.531 inches
outer:	2.500 inches	Weight.....	approximately 37.15 lbs. with fairings 36.66 lbs. less fairings

RELATIONSHIP OF PARTS: Used with:

Casing—36 smooth contour—10-ply.....	A. E. Reference Number 41-6653
Tubing—36 dual seal SCB.....	A. E. Reference Number 41-8551
or	
Tube—36 smooth contour.....	A. E. Reference Number 41-6654

ARMY

A. E. REFERENCE NUMBER: 41-8550

SPECIFICATIONS:

General..... applicable to AN-W-6
Superseded..... 25258

MANUFACTURER'S PART NUMBER: 530033M (magnesium); 530033M-1 (magnesium less fairings),

MANUFACTURER'S DRAWING NUMBER: Goodyear Tire & Rubber Co., 530033

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4109 530033M (magnesium); 4109 530033M1 (magnesium less fairings).

TECHNICAL ORDER NUMBER: 03-25D-7

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: The wheel is shipped as a complete assembly, including bearings, grease retainers and, if designated, fairings.

NAVY

The Navy uses Hayes H-3-102M which is interchangeable with Goodyear 530033M.

F. S. S. C. STOCK NUMBER: Stocked by A. S. O. under manufacturer's part number.

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY

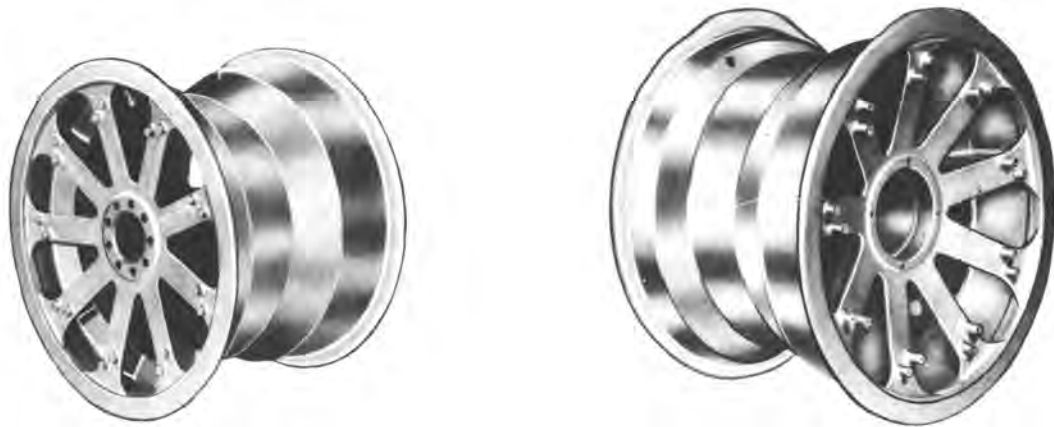
Models are used in services as noted in column 4

A—Army, N—Navy, B—British

Manufacturer	Manufacturer's Drawing Number	Manufacturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	British Reference Number
Goodyear Tire & Rubber Co.	530033	530033M	A-B	4109 530033M	03-25D-7	127A/630
	530033	530033M-1	A-B	4109 530033M1	03-25D-7	
Hayes Industries, Inc.	H-3-102	H-3-102A	A-B-N	4111 H3-102A	03-25B-1	127A/605
	H-3-102	H-3-102M	A-B-N	4111 H3-102M	03-25B-1	127A/605
Bendix Products Div.	58175	58175	A	4103 58175		



WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—39 SMOOTH CONTOUR NOSE

BENDIX 59625

DESCRIPTION: In this installation, the dual wheels are fixed rigidly to a 38 inch (length) axle by splines at each end and the axle revolves on two needle roller bearings located near the inner side of each wheel. This construction reduces vibration caused by the rotating wheels as each wheel revolves at the same speed. It also eliminates the use of the shimmy damper.

CHARACTERISTICS:

Rim type	drop center	Tire diameter	39 inches
Flange type	fixed	Flange diameter	20.625 inches
Axle type	splined on each end for dual wheels, 38 inches overall	Ledge diameter	18.750 inches
Axle diameter	inner: 2.953 inches outer: 2.494 inches	Overall width	15 inches
		Weight	approximately 35.6 lbs.

RELATIONSHIP OF PARTS: Used with:

Casing—39 smooth contour—10-ply	A. E. Reference Number 41-8701
Tube—39 smooth contour	A. E. Reference Number 41-8710
or	
Tube—39 dual seal SCB	A. E. Reference Number 41-8702

ARMY

A. E. REFERENCE NUMBER: 41-8725

SPECIFICATIONS:

General applicable to 98-25272

MANUFACTURER'S PART NUMBER: 59625M-2

MANUFACTURER'S DRAWING NUMBER: Bendix Products 59625

TYPE DESIGNATION: Type I

A. S. C. STOCK NUMBER: 4103 59625M2

TECHNICAL ORDER NUMBER: AN 03-25C-9

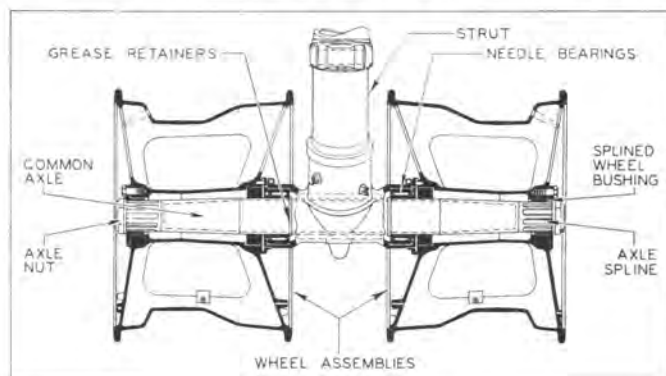
PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings and grease retainers.

NAVY

PROCUREMENT STATUS:

No procurement.





WHEELS LANDING GEAR SECTION



WHEEL ASSEMBLY—44 SMOOTH CONTOUR NOSE GOODYEAR 530663

DESCRIPTION: Actually designed as a main landing wheel but is used without a brake drum as a nose wheel.

CHARACTERISTICS:

Rim type	drop center	Tire diameter	44 inches
Flange type	fixed	Flange diameter	24.125 inches
Axle type	stub	Ledge diameter	22.000 inches
Axle diameter	inner: 3.750 inches	Overall width	16.250 inches
	outer: 3.000 inches	Weight	See chart below

RELATIONSHIP OF PARTS: Used with:

Casing—44 smooth contour—10-ply	A. E. Reference Number 41-8761
Tube—44 smooth contour	A. E. Reference Number 41-6853
or	
Tube—44 SCB dual seal	A. E. Reference Number 41-8777

ARMY

A. E. REFERENCE NUMBER: 41-8775

SPECIFICATIONS:

General applicable to AN-W-6

A. A. F. DRAWING NUMBER: applicable to S40J24

MANUFACTURER'S PART NUMBER:

530663A-1 (aluminum less fairings); 530663M-1 (magnesium less fairings).

MANUFACTURER'S DRAWING NUMBER: 530663

TYPE DESIGNATION: Type I

PRODUCTION STATUS: Under procurement.

SHIPPING DATA: Shipped as a complete wheel assembly including bearings, grease retainers and, if designated, fairings.

NAVY

PROCUREMENT STATUS: No procurement.

ALL MODELS BELOW ARE INTERCHANGEABLE AS AN ASSEMBLY
Models are used in services as noted in column 4
A—Army, N—Navy, B—British

Manufacturer	Manu- facturer's Drawing Number	Manu- facturer's Part Number	Used By	Air Service Command Stock Number	Army Technical Order Number	Approximate Weight	Material	Remarks
Goodyear Tire & Rubber Co.	530663	530663M-1	A	4109 530663M1		57.9 lbs.	Magnesium	Less fairings, otherwise identical to 530339. Under procurement as Government furnished equipment by the Army.
	530663	530663A-1	A	4109 530663A1		84.4 lbs.	Aluminum	
		530339	530339-M	A-N	4109 530339M	03-25D-7	61.33 lbs.	Magnesium

(RESTRICTED)

WHEEL ASSEMBLIES—SMOOTH CONTOUR—TYPE I

Wheel Assembly	A. E. Reference Number	Manufacturer's Drawing Number					Brake Used With (Main Landing Wheels Only)			Airplanes Used on		
		Bendix	Firestone	General	Goodyear	Hayes	British Reference Number	Size and Type	Mfr's Drawing Number	A. E. Reference Number	Army	Navv
8.00 Smooth Contour Tail	41-8850		AO-200		217552	B-3-76					L-5; PT-22	OY-1; HNS-1
8.00 Smooth Contour Tail	41-8855		AO-200F	VGC-8-5C-100	510625	B-3-83A, M					R-4B; YR-6A; R-6A	HOS-1
10.00 Smooth Contour Tail	41-9000	55612	BO-200	VGM-10	217466A 217466M	B-3-28	127A/671 (GY) 127A/619 (HA) 127A/662 (BE)				AT-10GF; AT-19; BT-13B; C-43; PT-23; PT-13D; PT-17; PT-22; PT-27; PT-12, 15	SNV-2; N2S-5; N2S-3; F4F-3; N2T-1; NR-1; SNJ-3; SO3C
12.50 Smooth Contour Tail	41-9200		CO-200A CO-200M		270860A 270860M	D-3-46	127A/632 (GY) 127A/643 (HA)				A-36A; A-24A, B; P-40E, F, K; UC-64-A; AT-6A, B, C, D; AT-9A; AT-16; AT-18	SNJ-5; SBD-1, 2, 3, 4, 5, 6
14.50 Smooth Contour Tail	41-9300	57457A 57457M	EO-200A EO-200M			B-3-69	127A/688 (FI) 127A/618 (HA) 127A/626 (BE)				P-47D; YP-60E; P-47C, G	SB2A, 2, 3, 4
14.50 Smooth Contour Tail	41-9305		EO-200F			B-3-74	127A/616 (HA)				YR-5A; R-5A; A-35A, B;	HO2S-1
17.00 Smooth Contour Tail	41-9450			203-A-799		D-3-71	127A/642 (HA)				A-30; AT-15	
23.00 Smooth Contour Nose	41-7800					D-3-7A, M	127A/653				B-17B; AT-21FA, FB, BL, MM	
26.00 Smooth Contour Nose	41-7950				731934M, M-1 731934A, A-1						CG-13A; A-20B, C G	BD-1, 2
26.00 Smooth Contour Tail	41-9800		KO-200-195A			G-3-217 G-3-168	127A/680 (HA)				B-17E, F, G; C-76	
27 Smooth Contour Glider	41-5770		27-D-2				127A/711	11 x 2 Reversible Hyd. Shoe	G-2-97	41-5751	CG-4A	
27 Smooth Contour Landing	41-5600	57000						11 x 2 1/2 Reversible Hyd. Shoe	57270	41-5601	AT-10GF	
27 Smooth Contour Landing	41-5650					G-3-297	127A/721	11 x 3 Reversible Hyd. Shoe	H-2-288	41-5151	P-40N; PT-23	
27 Smooth Contour Landing	41-5750					G-3-1A, A-1 G-3-1M, M-1	127A/607	11 x 2 Reversible Hyd. Shoe	G-2-299	41-5755	AT-6A, B, C, D; AT-16; BT-14; BT-15; BT-12; BT-13A, B; CG-4A	SNV-1, 2; SNJ-1, 2, 3, 4, 5
27 Smooth Contour Landing	41-5800				530101M		127A/639	7.6 x .080/.070 x 11 H.P. Disc	530177-M1	41-5801	A-36A	TDN-1
27 Smooth Contour Landing	41-5900				530441M		127A/697	7.6 x .100/.125 x 9 H.P. Disc	511124	41-5901	P-51B, C, D; P-63A, C, D	
27 Smooth Contour Nose	41-8100	57609A, A-2 57609M, M-2				G-3-387	127A/696 (BE)				P-38F, G, J, L, M, E, H; P-39D	
27 Smooth Contour Landing	41-5610				530761M-1			10.0W x 100/.125 x 7 H.P. Disc	511638M	41-5606	P-63	
27 Smooth Contour Nose		59447									Amph. C-47	
30 Smooth Contour Heavy Duty Landing	41-6050					H3-159A, M	127A/602	12 x 3 1/4 Reversible Hyd. Shoe	H-2-194	41-6051	P-40E, F, K, L, M, N	
30 Smooth Contour Light Duty Landing	41-6200					H-3-44	127A/604	12 x 2 1/4 Reversible Hyd. Shoe	H-2-99	41-6201	AT-9A; UC-64A	
30 Smooth Contour Nose	41-8250					H-3-124A, A-1 H-3-124M, M-1	127A/681				B-25C, D, J, H, G	PBJ-1
33 Smooth Contour Landing	41-6350	55902, 59180M 57679, 59180M-1					127A/698 (55902) 127A/672 (57679) 127A/718 (59180)	13 x 2 1/2 Reversible Hyd. Shoe	59799	41-6355	UC-45B, F; AT-7C, AT-11	SNB-1, 2C
33 Smooth Contour Nose	41-8400	57608A, PA-1 57608M, M-1					127A/669				B-26B, C, F, G; P-61A, B, C; AT-23A, B	JM-1
36 Smooth Contour Landing	41-6650	58725PA, 58725M 58725M-1					127A/719	14 1/2 x 10 1/4 Two Rotor Disc	58976	41-6655	AT-21FA, FB, BL, MM	
36 Smooth Contour Landing	41-6800				731029		127A/637	12.7 x .080/.070 x 13 Disc	731032M	41-6802	A-35; P-38F, G, J, L, M, E, H; CG-13A; A-31; A-35; A-35A, B; A-32	
36 Smooth Contour Nose	41-8550	58175M 58175M-1			530033A 530033M	H-3-102	127A/630 (GY) 127A/605 (HA)				B-24E, H, G, J; B-29-MA, -BW, -BN, -BA, A-26B; C-87; C-97	RY-3; PB4Y-1
39 Smooth Contour Nose	41-8700	57738M 59105M					127A/707 (59105)				B-32	
39 Smooth Contour Nose	41-8725	59625									C-74; C-82	
44 Smooth Contour Nose	41-8775				530663						C-54; C-54A; C-74	R5D-1
44 Smooth Contour Landing	41-6850				530339		127A/636	12.7 x .100/.125 x 16 Disc	731946	41-6851	A-20G, J, H, K	BD-1, 2
47 Smooth Contour Landing	41-6900				731943		127A/654	12.7 x .100/.125 x 14 H.P. Disc	510675M	41-6901	B-25C, D, J, H; A-26B; B-25A, B; P-61A, B, C; B-26, A, B	PBJ-1
56 Smooth Contour Landing	41-7250					H-3-101M	127A/600 (M) 127A/720 (M-1)	20 x 2 3/4 Duplex Exp. Tube (Outer)	H-2-259	41-7256	B-17F, G; B-24E, G, H, J; B-29-MA, -BW, -BN, -BA;	RY-3; PB4Y-1
56 Smooth Contour Nose	41-8800					H-3-252M		(Inner)	H-2-258	41-7255	B-32; C-82; C-87	
65 Smooth Contour Landing	41-7410				530649M-1			21.5 x .181/109 x 15 H.P. Disc	511402M	41-7421	XB-35; YB-35	
65 Smooth Contour Heavy Duty Landing	41-7420				530652M-1			21.5 x .181/109 x 15 H.P. Disc	511402M	41-7421	C-74	
110 Smooth Contour Landing	41-7440				560042M-1			34.0W x .284/172 x 14 H.P. Disc	530581M	41-7441	XB-36	

(REVISED 1 JULY 1944)

When procuring or requisitioning material consult the current applicable stock publication.

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WHEEL ASSEMBLIES—HIGH PRESSURE—TYPE II

Wheel Assembly	A. E. Reference Number	Manufacturer's Drawing Number					Brake Used With (Main Landing Wheels Only)			Airplanes Used on		
		Bandix	Firestone	General	Goodyear	Hayes	British Reference Number	Size and Type	Mfr's Drawing Number	A. E. Reference Number	Army	Navy
26 x 6 High Pressure Landing	41-5450				530094		127A/634	10.0 x .100/125 x 5 Disc	510548M	41-5451	P-39D, E, F, K, L, M, N, O	SO3C-2C, 3
30 x 7 High Pressure Landing	None	59179M				G-3-235		13 x 2 1/2 Reversible Hyd. Shoe	H-2-256	None	A-24A, B	SBD-3, 4, 5, 6
32 x 8 High Pressure Landing	41-6250				530645			12.7 x .100/125 x 7 H.P. Disc	511396M	41-6251	YP-60E	
34 x 9 High Pressure Landing	41-6550				530244			12.7 x .100/125 x 7 H.P. Disc	510944	41-6551	A-25A; P-59A, B	
34 x 9 High Pressure Landing	41-6500	57405M, M-1					127A/700	14 x 4 Reversible Hyd. Shoe	57495 or 57495AS	41-6501 41-6506	P-47B, C, D, G	
34 x 9 High Pressure Landing		57583					127A/649	13 x 3 1/2 Shoe	57529	None		SB2A-4

NOTE:—The 10 1/2 x 4, 12 1/2 x 4 1/2 and 14 1/2 x 5 high pressure sizes have been re-designated 'Extra High Pressure, Type VII'.

WHEEL ASSEMBLIES—LOW PRESSURE—TYPE III

Wheel Assembly	A. E. Reference	Manufacturer's Drawing Number					Brake Used With (Main Landing Wheels Only)			Airplanes Used On		
		Bandix	Firestone	General	Goodyear	Hayes	British Reference	Size and Type	Mfr's Drawing Number	A. E. Reference Number	Army	Navy
5.00-4 Low Pressure Auxiliary			5C2M								PQ-14A	TD2C-1
6.00-6 Low Pressure Landing	41-5000				D-3-210		127A/683	5 x 1 1/2 Expander Tube	D-2-112	41-5001	L-5	
6.00-6 Low Pressure Landing	41-5050				D-3-105		127A/684	5 x 1 1/2 Expander Tube	D-2-250	41-5004	L-5	NR-1
6.00-6 Low Pressure Landing	41-5100				511413M, M-1		127A/729	8.0 x 1.25 x .125 2.45 Mechanical Disc	511254M	41-5103	R-4B; YR-6A; R-6A; PQ-14A	HOS-1; TD2C-1
6.00-6 Low Pressure Landing			6CA71, 6CA72					6 1/4 x 1 Mech. 6CA36-66 (R) for 6CA71 Shoe 6CA75-66 (L)	6CA-39-66 (L) for 6CA72 6CA-34-66 (R)		L-2; L-3	
6.00-6 Low Pressure Landing			6CA81					6 1/2 x 1 1/4 Hyd. Shoe 6CA95-90 (R) PT-22	6CA94-90 (L) for L-6 6CA95-51 (R)		L-6; PT-22	
7.50-10 Low Pressure Landing	41-5200				G-3-49		127A/659	9 x 2 Expander Tube	G-2-210-1	41-5201	AT-17, A, B, C, D; AT-19; UC-78, B, C	TDR-1, 2; JRC
7.50-10 Low Pressure Landing	41-5250				G-3-73		127A/656	9 x 1 1/2 Expander Tube	G-2-122	41-5305	YR-5A; R-5, A; PT-19A, B; PT-20; PT-22; UC-61A; PT-23	HO2S-1; N2T-1
7.50-10 Low Pressure Landing	41-5300				G-3-81 G-3-81		127A/606	9 x 1 1/2 Expander Tube	G-2-67-1	41-5301	C-53; L-1, 1A	
7.50-10 Low Pressure Landing					218264		127A/667	7.6 x .080/.070 x 6 Disc	218262M	None	UC-43; C-43, C; AT-8	NH-1; GB-1, 2; 5NC-1; GH-1
8.00-4 Low Pressure Landing					D-3-13 D-3-14			5 x 1 Expander Tube	D-2-113	None	L-4A, H	NE-1, HE-1
9.00-6 Low Pressure Tail		52058	SO 200FM				127A/728 (FI) 127A/679 (BE)				C-47, A; C-53, D; C-43; PT-23	R4D-1, 5
10.00-7 Low Pressure Tail	41-9750				D-3-21 D-3-21-1						C-46A	R5C-1
15.00-16 Low Pressure Landing					530161M-1		127A/675	12.7 x .155/125 x 5 H.P. Disc	510967-2M1	None	A-29; C-57D; C-60A	PBO-1; R50-1, 2, 3, 4, 5, 6
15.00-16 Heavy Duty Low Pressure Landing					530109		127A/641	12.7 x .100/125 x 9 Disc	510581-M	None	B-34	
16.00-16 Low Pressure Landing					530476		127A/724	12.7W x .155/125 x 10 H.P. Disc	511162M	None	B-37; A-30, A	PV-1, 2
17.00-16 Low Pressure Landing		57386			530402		127A/655	14 x 3 Shoe	57584	None	C-47; C-53	R4D-1, 2, 3, 4, 5
17.00-20 Low Pressure Landing	41-6950				530402		127A/673	14.5W x .155/.094 x 9 H.P. Disc	511031M	41-6951	B-26B, C, F, G; C-54-A; C-62; C-69, A; C-76; AT-23A; B	R5D-1; JM-1
17.00-20 Low Pressure Nose	41-8780				530628						B-36	
19.00-23 Low Pressure Landing	41-7100				H-3-38M		127A/615	20 x 2 3/4 Duplex Expander Tube	H-2-257-1	41-7101	C-46A; B-17E, F	R5C-1

WHEEL ASSEMBLIES—EXTRA LOW PRESSURE—TYPE IV

12 x 5-3 Extra Low Pressure Tail					530054		127A/631				AT-7	SB2U-2; JRB-1; SNB-1, 2
5" Extra Low Pressure Landing					731802			6.7 x .080/.070 x 10 Disc	731799M	None	AT-7	SNB-2; JRB-1, 2

WHEEL ASSEMBLIES—STREAMLINE—TYPE V

24 Streamline Landing	41-5150	56372A, M						10 x 1 1/2 Shoe	57863 (L) 57864 (R)	41-5155 41-5156	PT-13B, D, PT-17A	N2S-1, 2, 3, 4, 5
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When procuring or requisitioning material consult the current applicable stock publication

WHEEL ASSEMBLIES—LOW PROFILE—TYPE VI

Wheel Assembly	A. E. Reference Number	Manufacturer's Drawing Number					British Reference Number	Brake Used With (Main Landing Wheels Only)		Airplanes Used On	
		Bendix	Firestone	General	Goodyear	Hayes		Size and Type	Mfr's Drawing Number	A. E. Reference Number	Army
19 x 6.80-10 Low Profile Nose	41-7500		HO-200F				127A/689				P-39F, K, L, M, N, Q; P-40E
22 x 7.25-11.50 Low Profile Nose	41-7600	58076	IO-200F				127A/690 (FI)				P-59A, B; P-63A, C, D
22 x 7.25-11.50 Low Profile Nose	41-7605	145120	IO-200M			D-105					P-80
33 x 11.50-16.50 Low Profile Nose						530535					RB-1

WHEEL ASSEMBLIES—EXTRA HIGH PRESSURE—TYPE VII

10½ x 4 Extra High Pressure Auxiliary*						511377					
10½ x 4 Extra High Pressure Auxiliary	*41-9050		QO-200FM QO-200F	203-A-919	511482M	D-3-285M-1				P-51H	F4F-4; F6F-3; FM-1
12½ x 4½ Extra High Pressure Tail	*41-9185		JO-200M-1 JO-200-1			D-3-292-1	127A/687 (FI) 127A/708 (HA)			P-51, A, B, C, D; P-75A	
12½ x 4½ Extra High Pressure Tail	*41-9190		JO-200FM	203-A-867	511350	D-3-275X-1				P-51H; UC-78, B, C; AT-17, A, B, C, D; P-82	TBM-1; F4U-1, 2; TBF-1; FG-1; F3A-1, 2, 3
14½ x 5 Extra High Pressure Tail	*41-9350		UO-200M UO-200-195			D-3-27B-1				P-47B, D; P-72	
26 x 6.6 Extra High Pressure Landing	41-6656				530746M-1		14.5 x 2.75 x .485 2-32 x 50.3	Single Disc	530745	41-6657	P-80
32 x 8.8 Extra High Pressure Landing	41-6255				530836 530836M-1		16.5 x 2.75 x .437 3-2.75 x 35.8	Single Disc	540074	41-6660	P-82
32 x 8.8 Extra High Pressure Landing	41-6285				530545M-1		12.7 x .100/.125 x 10 H.P. Disc		511611M	41-6286	P-75A
34 x 9.9 Extra High Pressure Landing	41-6600				530660M-1		12.7W x .155/.094 x 7 H.P. Disc		511415M	41-6601	P-72

*Formerly known as High Pressure, Type II

(REVISED 1 JULY 1944)

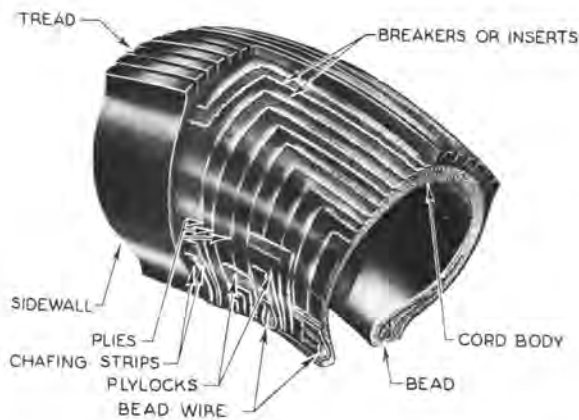
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AIRPLANE CASINGS



PURPOSE:

Airplane casings and tubes assist in cushioning the shock of landing on a solid surface, permit the plane to be safely brought to a stop, and facilitate take-offs. The casing protects the tube, holds it in the proper shape and shelters it from the abrasive action of contact with the ground.

DESCRIPTION:

The first airplane casings were similar to early high pressure automobile tires. Loads were light, therefore hard contact with the ground did little or no damage. As airplane weights and landing speeds

increased, performance demands on casings increased in proportion. In 1927 low pressure (balloon) tires which provided greater cushioning and flotation characteristics were introduced. The low pressure tire is suitable for all around use, since it carries heavy loads with good flotation and low ground pressure characteristics. Later the streamline tire was developed to decrease the parasitic drag of fixed landing gear. This casing was pointed, elliptical in cross section and faired into the wheel. When retractable landing gear came into use, the necessity for streamlining was eliminated and the smooth contour tire was introduced. From these basic types of tires, other casing shapes have been developed. The low profile nose wheel tire provides extra width, and due to the support offered by the extra wide flanges on the wheel it stays in position and continues to operate even when punctured. The extra low pressure tire is a further development with still wider contact area, making it suitable for use on rough runways and fields.

An airplane casing consists of three main parts: cord body or carcass, tread, and the beads. The cord body, consisting of layers, or plies of rubberized cords supplies the necessary strength to resist bruising and may be of cotton, rayon, or nylon construction. Originally cotton cord was used, later "cotton or rayon" was specified, with the latter becoming more and more commonly used until cotton was dropped from the specifications altogether except for a few special instances where it was optional. Latest revisions of specification AN-C-55 call for "rayon or nylon" construction, with the trend toward the latter.

The tread is a layer of rubber on the outer circumference of the tire and is the wearing surface. The tread provides protection to the cord body and may be divided into three classes; plain, non-skid and channel tread. Non-skid patterns used by the various manufacturers differ, but this does not affect the type of casing. The plain (or smooth) casing has no tread design. Channel tread casings have a non-skid design and in addition have high projecting shoulders and extra wide tread providing greater traction efficiency. This permits a speedier take-off from soft terrain, increases non-skid properties on muddy or wet ground and considerably increases the durability of the casing.

Beads are the foundation on which the tire is built. They consist of strands of steel wire embedded in rubber and wrapped with fabric. Beads give the casing an inextensible base around which the plies are bonded and permit the tire to be held firmly on the wheel.

For some time all new casings have been static conducting, however since many casings are being re-treaded thus losing their static conducting properties this feature is of questionable value. In the future, tires will not be static conducting and airplanes have returned to the practice of carrying a drag wire to take the charge of static electricity from the plane as it lands.

INTERCHANGEABILITY:

Auxiliary streamline casings are interchangeable with smooth contour casings as foot-noted on the following charts. These are the only instances where casings as such, have any degree of interchangeability between types. Interchangeability as a unit with the wheel assembly is covered in the section devoted to wheels. Tread types within a given size are completely interchangeable and are governed by the particular service conditions involved.

(Continued on page 123)



AIRPLANE CASINGS

(Continued from page 122)

Casings are often named for the wheel they are used with, such as: Casing—Landing Wheel, or Casing—Tail Wheel, although any casing may be used on landing, tail or nose wheel provided the wheel dimensions and type are identical. For this reason the words "Landing," or "Auxiliary" (Tail or Nose) are often omitted from the nomenclature in this publication.

Six of the seven types of casings shown below are listed in Army-Navy Aeronautical specification AN-C-55 for aircraft landing, auxiliary, and beaching casings. Streamline casings are obsolete and not covered by this specification.

This Index presents information on casings in chart form. Refer to section entitled "Chart Explanation—Airplane Casings," for detailed explanation of the columns.



**TYPE I
SMOOTH CONTOUR**
May be plain, non-skid or channel tread



**TYPE II
HIGH PRESSURE**
May be plain, non-skid or channel tread



**TYPE III
LOW PRESSURE**
May be plain, non-skid or channel tread



**TYPE IV
EXTRA LOW PRESSURE**
May be plain or non-skid



**TYPE V
STREAMLINE**
(Obsolete)



**TYPE VI
LOW PROFILE**
Plain only



**TYPE VII
EXTRA HIGH PRESSURE**
May be non-skid or channel tread



CHART EXPLANATION

AIRPLANE CASINGS

The following explanation applies to the charts on casings only. These charts, which consist of 13 columns of information, should answer most questions regarding Army and Navy casings now in use.

COLUMN 1—CASING SIZE AND DESCRIPTION.

The size as presented in the charts should be used without variation as these casing dimensions are standard practice throughout the aircraft industry.

COLUMN 2—A. E. REFERENCE NUMBER.

This number is the identifying indication assigned by Materiel Command, Army Air Forces. It also indicates interchangeability of items as listed in the Aeronautical Equipment Reference Book of Component Parts published by Materiel Command.

COLUMN 3—TREAD.

Three tread designs are used, Non-skid, Plain and Channel. The word "smooth" should not be used to indicate a plain tread.

COLUMN 4—PLY.

This column shows the number of plies in each casing.

COLUMN 5—USE.

This column indicates whether the tire is currently used on a nose wheel, tail wheel, landing wheel, tail and nose wheel, or nose and landing wheel.

COLUMN 6—ULTIMATE MAXIMUM STATIC LOAD (POUNDS).

Read explanation for Column 7.

COLUMN 7—TEST INFLATION PRESSURE (LBS./SQ. IN.).

The charts show the ultimate maximum static load and test inflation pressure in pounds as shown in the following example: A 10.00 smooth contour, 6-ply casing has a load range of from 425 pounds at 30 pounds per square inch air pressure, to 650 pounds (Ult. Max. Static Load) at 45 pounds (test inflation) per square inch air pressure. The latter is the maximum load permitted, and are the only figures shown in specification AN-C-55 and in these charts.

COLUMN 8—WEIGHT.

This is the maximum allowable weight for each casing. Usually the casing is lighter.

COLUMN 9—USED BY.

A—Army
N—Navy
B—British

COLUMN 10—AIR SERVICE COMMAND STOCK NUMBER.

This number is assigned by the Air Service Command, Army Air Forces.

COLUMN 11—AVIATION SUPPLY OFFICE STOCK NUMBER.

This number is used by the Aviation Supply Office of the Naval Aircraft Factory in Philadelphia and is the only reference number assigned by the Navy.

COLUMN 12—BRITISH REFERENCE NUMBER.

This number is assigned by the British and appears in the Vocabulary of American Equipment for the Royal Air Force.

COLUMN 13—MANUFACTURER.

Only the initials or abbreviation of each manufacturer's name appears in the charts. The full names are as follows:

GY—Goodyear Tire & Rubber Company—Akron, Ohio.
GR—B. F. Goodrich Company—Akron, Ohio.
GEN—General Tire & Rubber Company—Akron, Ohio.
US—United States Rubber Company—Detroit, Michigan.
FI—Firestone Tire & Rubber Company—Akron, Ohio.
FGS—Frank G. Schenuit Company—Baltimore, Maryland.

CASINGS—SMOOTH CONTOUR—TYPE I

Casing Size and Description	A. E. Reference Number	Tread	Ply	Use	Ultimate Max. Static Load (Lbs.)	Test Inflation Pressure (Lb.-Sq. In.)	Weight (Lbs.)	Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufacturer
									Class	Serial			
8.00 S.C., 4-ply Rayon or Nylon	41-8851	Plain	4	Tail	350	45	2.01	A-N-B	3900	300500 (Rayon)	R83-T-7304	127A/311 (Rayon)	GR-GY-FI-GEN-US
10.00 S.C., 4-ply	*41-9001	Plain	4	Tail			2.60	A-N-B	3900	302000 (Rayon)	R83-T-7322	127A/4 (Cotton)	
10.00 S.C., 6-ply Rayon or Nylon	41-9002	Plain	6	Tail	650	45	3.50	A-N-B	3900	302500 (Rayon)	R83-T-7326	127A/194 (Rayon)	GR-GY-FI-GEN-US
10.00 S.C., 6-ply Rayon or Nylon	41-9004	Channel	6	Tail	650	45	4.10	A	3900	200300 (Rayon)		127A/312 (Rayon)	GR-GY-FI-GEN-US
12.50 S.C., 4-ply	*41-9151	Plain	4	Tail			4.10	A-N-B	3900	303500 (Rayon)	R83-T-7330	127A/195 (Rayon)	FI- US
12.50 S.C., 6-ply Rayon or Nylon	41-9152	Plain	6	Tail	1100	50	6.50	A-N-B	3900	304500 (Rayon)	R83-T-7338	127A/313 (Rayon)	GR-GY-FI-GEN-US
12.50 S.C., 6-ply Rayon or Nylon	41-9176	Channel	6	Tail	1100	50	6.50	A-B	3900	202000 (Rayon)		127A/366 (Rayon)	GR-GY-FI- US
14.50 S.C., 4-ply Cotton	*41-9301	Plain	4	Tail			6.50	A-B	3900	305000		127A/228 (Cotton)	GR- US
14.50 S.C., 6-ply Rayon or Nylon	41-9302	Plain	6	Tail	1450	50	9.30	A-N-B	3900	306000 (Rayon)	R83-T-7356	127A/314 (Rayon)	GR-GY- US
14.50 S.C., 6-ply Rayon or Nylon	41-9304	Channel	6	Tail	1450	50	9.30	A-B	3900	204500 (Nylon)		127A/371 (Rayon)	GR-GY-FI-GEN-US
17.00 S.C., 6-ply Rayon	*41-9451	Plain	6	Tail	2300	55	11.50	A-N-B	3900	306500 (Rayon)	R83-T-7376	127A/315 (Rayon)	GR-GY-FI-GEN-US-FGS
17.00 S.C., 8-ply Rayon or Nylon	41-9453	Plain	8	Tail	2300	55	13.00	A-N-B	3900	307000 (Rayon)	R83-T-7378	127A/277 (Rayon)	GR-GY-FI-GEN-US-FGS
19.00 S.C., 6-ply Rayon or Nylon	*41-7451	Plain	6	Nose	2850	60	14.00	A-N-B	3900	308500 (Rayon)	R83-T-7388	127A/316 (Rayon)	GR-GY-FI-GEN-US
23.00 S.C., 6-Ply	*41-7801	Plain	6	Nose or Tail			17.10	A-B	3900	309500 (Rayon)		127A/232 (Rayon)	GR-GY
23.00 S.C., 8-ply Rayon or Nylon	41-7802	Plain	8	Nose or Tail	4700	70	23.50	A-N-B	3900	310500 (Rayon)	R83-T-7414	127A/317 (Rayon)	GR-GY- GEN-US
26.00 S.C., 8-ply	*41-7951	Plain	8	Nose			29.10	A-B	3900	313000 (Rayon)		127A/187 (Rayon)	GY
26.00 S.C., 10-ply Rayon or Nylon	41-7952	Plain	10	Nose or Tail	6300	70	35.00	A-N-B	3900	313500 (Nylon)	R83-T-7438	127A/318 (Rayon)	GR-GY-FI-GEN-US
27 S.C., 6-ply Rayon	*41-5602	Non-skid	6	Nose or Landing			22.20	A-B	3900	315500		127A/170 (Rayon)	GR-GY-FI-GEN-US
27 S.C., 8-ply Rayon or Nylon	41-5603	Non-skid	8	Nose or Landing	3500	42	29.00	A-N-B	3900	317000 (Nylon)	R83-T-7019	127A/301 (Rayon)	GR-GY-FI-GEN-US-FGS
27 S.C., 8-ply Nylon Fighter Type	*41-5904	Non-skid	8	Landing	3500	42	24.00	A-B	3900	317750		127A/237 (Nylon)	GR-GY-FI-GEN-US-FGS
30 S.C., 6-ply Rayon	*41-6052	Non-skid	6	Landing			28.50	A-N-B			R83-T-7021	127A/504 (Rayon)	GY- GEN-US
30 S.C., H.D., 8-ply Rayon or Nylon	41-6053	Non-skid	8	Nose or Landing	4400	45	35.00	A-N-B	3900	321000 (Rayon)	R83-T-7028	127A/302 (Rayon)	GR-GY-FI-GEN-US-FGS
30 S.C., 8-ply Rayon or Nylon	41-6060	Channel	8	Nose	4400	45	45.50	A					GR-GY-FI- US
33 S.C., 8-ply Rayon or Nylon	41-6352	Non-skid	8	Nose or Landing	5900	48	45.00	A-N-B	3900	325750 (Nylon)	R83-T-7034	127A/303 (Rayon)	GR-GY-FI-GEN-US-FGS
36 S.C., 10-ply Rayon or Nylon	41-6653	Non-skid	10	Nose or Landing	8200	51	69.00	A-N-B	3900	330000 (Rayon)	R83-T-7049	127A/304 (Rayon)	GR-GY-FI-GEN-US
39 S.C., 10-ply Rayon or Nylon	41-8701	Plain or Non-skid	10	Nose or Landing	10000	55	81.00	A-N-B	3900	333750 (Nylon)	R83-T-7056	127A/305 (Rayon)	GR-GY-FI-GEN-US
44 S.C., 8-ply Rayon or Cotton	*41-6852	Non-skid	8	Landing			89.90	A-B				127A/189 (Rayon)	FI
44 S.C., 10-ply Rayon or Nylon	41-8761	Non-skid	10	Nose or Landing	13000	59	102.00	A-N-B	3900	334000 (Rayon N/S)	R83-T-7063	127A/508 (Cotton)	GR-GY-FI-GEN-US
47 S.C., 10-ply Rayon or Nylon	41-6902	Non-skid	10	Nose or Landing			119.50	A-B				127A/306 (Rayon)	GR-GY-FI-GEN-US
47 S.C., 12-ply Rayon or Nylon	41-6903	Non-skid	12	Landing	16300	62	132.00	A-N-B	3900	340500 (Rayon)	R83-T-7069	127A/242 (Rayon)	GR-GY-FI-GEN-US
51 S.C., 14-ply Rayon or Nylon	41-2013	Non-skid	14	Landing	21500	67	170.00	A-B				127A/307 (Rayon)	GR-GY
56 S.C., 16-ply Rayon or Nylon	41-7252	Non-skid	16	Nose or Landing	30000	84	230.00	A-N-B	3900	344500 (Nylon)	R83-T-7088	127A/308 (Rayon)	GR-GY-FI-GEN-US
56 S.C., 18-ply Nylon	41-7528	Non-skid	18	Nose or Landing				A		345000 (Rayon)			GR-GY
65 S.C., 18-ply Rayon or Nylon	41-7424	Non-skid	18	Landing	37500	78	345.00	A					GR- FI
65 S.C., 22-ply Rayon or Nylon	41-7426	Non-skid	22	Landing	45000	95	400.00	A					GR- FI
110 S.C., 34-ply Rayon or Nylon	41-7442	Non-skid	34	Landing									GY

*=Obsolete NOTE: Smooth Contour Auxiliary Wheel Casings may be substituted for Streamline Tail Wheel Casings as follows:
 Smooth Contour Size—8.00—10.00—12.50—14.50—17.00—19.00
 Streamline Size —8.00—10.50—13.25—15.50—18.00—20.00

Applicable AND Drawing Numbers:
 AND 10550 Rim Contours—Smooth Contour Master Landing Wheel
 AND 10551 Rim Contours—Smooth Contour Master Auxiliary Wheel Specification: AN-C-55

(REVISED 1 JULY 1944)

When procuring or requisitioning material consult the current applicable stock publication.

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CASINGS—HIGH PRESSURE—TYPE II

Casing Size and Description	A. E. Reference Number	Tread	Ply	Use	Ultimate Max. Static Load (Lbs.)	Test Inflation Pressure (Lb-Sq. In.)	Weight (Lbs.)	Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufacturer
									Class	Serial			
10 x 3 H.P., 4-ply Rayon or Nylon	*41-1202	Plain or Non-skid	4	Nose or Tail	400	55	2.50	A-N-B	3900 3900	125000 (Rayon Pl.) 124500 (Rayon N/S)	R83-T-5420	127A/330 (Rayon Pl.)	GY-GR US
26 x 6 H.P., 6-ply Rayon	*41-5452	Non-skid	6	Landing			17.70	A-N-B	3900	147500	R83-T-5472	127A/235 (Rayon)	GEN
26 x 6 H.P., 8-ply Rayon or Nylon	41-5453	Non-skid	8	Landing	3750	90	25.00	A-N-B	3900	149500 (Rayon)	R83-T-5483	127A/319 (Rayon)	GY-GR
26 x 6 H.P., 8-ply Rayon or Nylon	41-5454	Channel	8	Landing	3750	90	27.00	A-B	3900	206500 (Rayon)		127A/369 (Rayon)	GY-GR-FI-GEN-US
30 x 5 H.P., 4-ply Rayon	*	Non-skid	4	Landing	1600	50		A-N-B			R83-T-5502	127A/326 (Rayon)	
30 x 7 H.P., 8-ply Rayon or Nylon	41-1613	Non-skid	8	Landing	4700	90	35.00	A-N-B	3900	154000 (Rayon)	R83-T-5532	127A/320 (Rayon)	GY-GR-FI-GEN-US
32 x 6 H.P., 4-ply	*	Non-skid	4	Landing	2200	55	16.00	A-N-B	3900	158000 (Rayon)	R83-T-5552	127A/327 (Rayon)	GY US
32 x 8 H.P., 8-ply Rayon or Nylon	41-6252	Non-skid	8	Landing	6000	90	40.00	A-N-B	3900	159000 (Rayon)	R83-T-5581	127A/322 (Rayon)	GY-GR-FI-GEN-US
32 x 8 H.P., 8-ply Rayon or Nylon	41-6277	Channel	8	Landing	6000	90		A					
34 x 9 H.P., 8-ply Rayon	*41-6502	Non-skid	8	Landing			45.20	A-B				127A/192 (Rayon)	GY-GR-FI-GEN-US-FGS
34 x 9 H.P., 10-ply Rayon or Nylon	41-6503	Non-skid	10	Landing	7000	80	55.00	A-N-B	3900	162000 (Rayon)	R83-T-5598	127A/323 (Rayon)	GY-GR-FI-GEN-US-FGS
34 x 9 H.P., 10-ply Fighter Type	*41-6505	Non-skid	10	Landing	7000	80	45.00	A					GY-GR-FI-GEN-US
36 x 8 H.P., 6-ply	*	Non-skid	6	Landing	4000	60	28.00	A-N-B	3900	166000 (Rayon)	R83-T-5606	127A/328 (Rayon)	GY

*=Obsolete

APPLICABLE AND DRAWING NUMBERS:

AND 10552 Rim Contours—26 x 6 High Pressure Master Landing Wheel
 AND 10553 Rim Contours—30 x 7 and 32 x 8 High Pressure Master Landing Wheel
 AND 10554 Rim Contours—34 x 9 High Pressure Master Landing Wheel
 AND 10558 Rim Contours—10 x 3 High Pressure Master Auxiliary Wheel

SPECIFICATION: AN-C-55

NOTE:—The 10½ x 4, 12½ x 4½, 14½ x 5 and 24 x 7.7 high pressure sizes have been re-designated 'Extra High Pressure, Type VII'.

CASINGS—LOW PRESSURE—TYPE III

Casing Size and Description	A. E. Reference Number	Tread	Ply	Use	Ultimate Max. Static Load (Lbs.)	Test Inflation Pressure (Lb-Sq. In.)	Weight (Lbs.)	Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufacturer
									Class	Serial			
5.00-4 L.P., 6-ply Rayon or Nylon	41-1002	Plain	6	Tail	1200	55	6.00	A-N-B	3900	101000 (Rayon)	R83-T-6021	127A/346 (Rayon)	GR-GY-FI-GEN-US-FGS
6.00-6 L.P., 4-ply Rayon or Nylon	41-1013	Plain or Non-skid	4	Landing	1050	24	8.50	A-N	3900	103500 (Rayon N/S)	R83-T-6031 (N/S) R83-T-6036 (Pl.)		GR-GY-FI-US-GEN-FGS
6.50-10 L.P., 6-ply Rayon or Nylon	41-1023	Non-skid	6	Landing	1700	32	16.50	A-N-B	3900	105500 (Rayon)	R83-T-6060	127A/335 (Rayon)	GR-GY-FI-GEN-US-FGS
7.00-5 L.P., 4-ply Rayon or Nylon	41-1032	Plain	4	Nose or Tail	1100	25	7.00	A-B	3900	107500 (Rayon)		127A/347 (Rayon)	GR US
7.00-6 L.P., 4-ply Rayon or Nylon	41-5002	Non-skid	4	Landing	1200	24	11.00	A-N-B	3900	108500 (Rayon)	R83-T-6085	127A/333 (Rayon)	GR-GY-FI
7.00-6 L.P., 4-ply Nylon for Helicopter	41-5101	Non-skid	4	Landing			4.50	A-B	3900	109500		127A/291 (Rayon)	GY
7.50-10 L.P., 4-ply Cotton or Rayon	*41-5302	Non-skid	4	Landing			12.30	A	3900 3900	110000 (Cotton) 111000 (Rayon)			GEN
7.50-10 L.P., 6-ply Rayon or Nylon	41-5202	Non-skid	6	Landing	2400	37	18.00	A-N-B	3900	112500 (Rayon)	R83-T-6118	127A/335 (Rayon)	GR-GY-FI-GEN-US
7.50-10 L.P., 6-ply Nylon for Helicopter	41-5206	Non-skid	6	Landing	2400	37	11.00	A	3900	113500			GY
8.00-4 L.P., 4-ply Rayon or Nylon	41-1043	Plain or Non-skid	4	Landing	900	18	8.50	A-N-B	3900	114300 (Rayon N/S)	R83-T-6135 (N/S) R83-T-6140 (Pl.)	127A/264 (Rayon)	GR-GY-FI-GEN-US-FGS

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CASINGS—LOW PRESSURE—TYPE III—Cont'd

Table with columns: Casing Size and Description, A. E. Reference Number, Tread, Ply, Use, Ultimate Max. Static Load (Lbs.), Test Inflation Pressure (Lb-Sq. In.), Weight (Lbs.), Used By, Air Service Command Stock Number (Class, Serial), Aviation Supply Office Stock Number, British Reference Number, Manufacturer. Rows include various casing sizes like 8.00-5 L.P., 8.50-10 L.P., etc.

SPECIFICATION: AN-C-55

APPLICABLE AND DRAWING NUMBERS:

* = Obsolete

- AND 10561 Rim Contour—7.00-6 Low Pressure Master Landing Wheel
AND 10562 Rim Contour—6.50-10, 7.50-10, 8.50-10, 15.00-16, 19.00-23, 9.50-12, 11.00-12 and 12.50-14 Low Pressure Master Landing Wheel
AND 10563 Rim Contour—16.00-16, 17.00-16, 18.00-16, 20.00-18 Low Pressure Master Landing Wheel
AND 10566 Rim Contour—17.00-20 Low Pressure Master Landing Wheel
AND 10567 Rim Contour—5.00-4, 7.00-5, 8.00-5 and 9.00-6 Low Pressure Master Auxiliary Wheel
AND 10571 Rim Contour—10.00-7, Low Pressure Master Auxiliary Wheel

CASINGS—EXTRA LOW PRESSURE—TYPE IV

Table with columns: Casing Size and Description, A. E. Reference Number, Tread, Ply, Use, Ultimate Max. Static Load (Lbs.), Test Inflation Pressure (Lb-Sq. In.), Weight (Lbs.), Used By, Air Service Command Stock Number (Class, Serial), Aviation Supply Office Stock Number, British Reference Number, Manufacturer. Rows include casing sizes like 12 x 5-3 Extra Low Pressure, 16 x 7-3 Extra Low Pressure, etc.

APPLICABLE AND DRAWING NUMBER: AND 10568 Rim Contour—Extra Low Pressure Master and Auxiliary Wheel

SPECIFICATION: AN-C-55

(REVISED 1 JULY 1944)

When procuring or requisitioning material consult the current applicable stock publication.

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CASINGS—STREAMLINE—TYPE V (OBSOLETE)

Casing Size and Description	A. E. Reference Number	Tread	Ply	Use	Ultimate Max. Static Load (Lbs.)	Test Inflation Pressure (Lb-Sq. In.)	Weight (Lbs.)	Used By	Air Service Command		Aviation Supply Office Stock Number	British Reference Number	Manufacturer
									Class	Serial			
24 Streamline, 4-ply Cotton or Rayon		Plain	4	Landing	1600	26	14.00	A-N-B	3900	446500 (Cotton)	R83-T-8320	127A/358 (Rayon)	GY
27 Streamline, 6-ply Cotton or Rayon		Plain	6	Landing	2200	28	23.00	A-N-B	3900	447500 (Cotton)	R83-T-8330	127A/6 (Rayon)	GY
31 Streamline, 6-ply Cotton or Rayon		Plain	6	Landing	3100	32	29.00	A-N-B	3900	448500 (Cotton)	R83-T-8342	127A/361 (Rayon)	GY
45 Streamline, 8-ply Cotton or Rayon		Plain	8	Landing	8100	42	97.00	A-N-B	3900	452000 (Cotton)	R83-T-8390	127A/364 (Rayon)	

APPLICABLE AND DRAWING NUMBERS: AND 10569 Rim Contour—Streamline Master Landing Wheel
SPECIFICATION: AN-C-55

CASINGS—LOW PROFILE—TYPE VI

19 x 6.80-10 Low Profile, 6-ply Rayon or Nylon	41-7501	Plain	6	Nose	1600	55	14.00	A	3900	208000 (Rayon)			GY-FI-US
22 x 7.25-11.50 Low Profile, 6-ply Rayon or Nylon	41-7601	Plain	6	Nose	2000	55	17.00	A-N	3900	208100 (Nylon) 208200 (Rayon)	R83-T-6301		GY-FI-US-GR
26 x 9.00-13 Low Profile, 8-ply Rayon or Nylon	41-1432	Plain	8	Nose	3000	52	34.00	N					GY
33 x 11.50-16.50 Low Profile, 10-ply Rayon or Nylon	41-1642	Plain	10	Nose	5500	65	51.00	N			R83-T-6305		GY
40 x 14.00-20 Low Profile, 10-ply Rayon or Nylon	41-8732	Plain	12	Nose	10720	80	105.00	A					GY-FI

APPLICABLE AND DRAWING NUMBERS: AND 10570 Rim Contour—Low Profile Master Auxiliary Wheel
SPECIFICATION: AN-C-55

CASINGS—EXTRA HIGH PRESSURE—TYPE VII

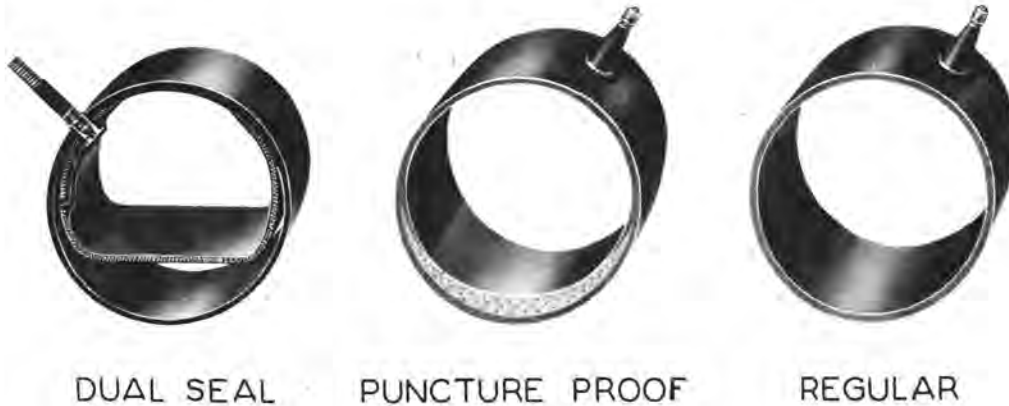
10½ x 4 E.H.P., 6-ply Rayon or Nylon	*41-9051	Channel	6	Tail	1200	85	4.70	A-N			R83-T-7595		GY-GR-FI-GEN-US-FGS
10½ x 4 E.H.P., 6-ply Rayon or Nylon	*	Plain	6	Tail	1200	85	4.00	A-N	3900	126750 (Nylon)	R83-T-7601		GY-GR-FI-US
12½ x 4½ E.H.P., 8-ply Rayon or Nylon	*41-9186	Channel	8	Tail	1800	75	7.00	A-N-B	3900	202500 (Nylon) 203000 (Rayon)	R83-T-7345	127A/367 (Rayon)	GY-GR-FI-GEN-US-FGS
14½ x 5 E.H.P., 8-ply Rayon or Nylon	*41-9351	Channel	8	Tail	2400	75	11.00	A-N-B	3900	205500 (Nylon) 206000 (Rayon)	R83-T-5745		GY-GR-FI-GEN-US
24 x 7.7 E.H.P., 8-ply Nylon	*41-7812	Non-skid	8	Landing	5100	80	25.00	A					GY-FI-GEN
26 x 6.6 E.H.P., 8-ply Rayon or Nylon	41-6658	Channel	8	Landing	5000	82	32.00	A-N					GY-GR-FI
30 x 7.7 E.H.P., 8-ply Rayon or Nylon	41-1623	Channel	8	Landing	6500	80	39.00	A-N			R83-T-5543		GR
32 x 8.8 E.H.P., 8-ply Rayon or Nylon	41-6260	Non-skid	8	Landing	7500	80	43.00	A					
32 x 8.8 E.H.P., 8-ply Rayon or Nylon	41-6287	Channel	8	Landing	7500	80	50.00	A					GY-FI-GR
34 x 9.9 E.H.P., 10-ply Rayon or Nylon	41-6603	Non-skid	10	Landing	8500	70	59.00	A-N					GY
34 x 9.9 E.H.P., 10-ply Rayon or Nylon	41-6510	Channel	10	Landing	8500	70	66.00	A-N			R83-T-5597		GY-GR
36 x 11 E.H.P., 10-ply Rayon or Nylon	41-1663	Channel	10	Landing	9500	70	76.00	A-N			R83-T-5608		GY-GR
38 x 11 E.H.P., 12-ply Rayon or Nylon	41-1673	Channel	12	Landing	11000	82	100.00	A-N					
40 x 12 E.H.P., 12-ply Rayon or Nylon	41-1803	Channel	12	Landing	12500	75	110.00	A-N					GY
42 x 12 E.H.P., 12-ply Rayon or Nylon	41-1813	Channel	12	Landing	14000	75	120.00	A-N					
44 x 13 E.H.P., 14-ply Rayon or Nylon	41-1823	Non-skid	14	Landing	16000	75	137.00	A-N					
46 x 14 E.H.P., 16-ply Rayon or Nylon	41-1843	Non-skid	16	Landing	18000	75	165.00	A-N					

APPLICABLE AND DRAWING NUMBERS: AND 10573 Rim Contours—26 x 6.6, 30 x 7.7, 32 x 8.8, 34 x 9.9, 36 x 11, 38 x 11, 40 x 12, 44 x 13, 42 x 12 and 46 x 14 Extra High Pressure Master Landing Wheels
SPECIFICATION: AN-C-55 AND 10559 Rim Contours—10½ x 4 High Pressure Master Auxiliary Wheel

*Formerly known as High Pressure, Type II



AIRPLANE TUBES



DUAL SEAL

PUNCTURE PROOF

REGULAR

PURPOSE:

The sole function of the tube is to hold the air in the casing. It is the air within the casing that supports the static weight of the airplane, absorbs a portion of the initial landing shock and smooths out the take-off and landing runs.

DESCRIPTION:

There are three distinct kinds of inner tubes: regular, puncture proof, and dual seal. Only the regular and dual seal are currently being procured or used by the Air Forces. They may be of natural or synthetic rubber or a compound of reclaimed and natural rubber.

The regular tube is doughnut shaped, sized to fit the inside of the corresponding size casing and is provided with an air valve for proper inflation.

The puncture proof tube is similar to the regular tube but has a lining of soft puncture sealing rubber compound molded to the inside. If the tube is punctured the sealing compound is forced into the hole and solidifies upon contact with the air, efficiently sealing the puncture.

The dual seal tube is a tube within a tube. It consists of an inner compartment of two or more plies of rubberized fabric within a heavy tube, both united at the base and provided with a valve arrangement permitting direct inflation to both compartments. There is no connection between the two chambers other than the valve and when the proper inflation pressure has been reached the valve core housing is tightened thus sealing off the inner compartment from the outer.

When tire and tube fail from puncture or blow-out, pressure in the outer compartment naturally drops as the air escapes. This pressure drop in the outer compartment causes the inner compartment, still under full pressure, to expand and fill the tire. Being made of cord fabric, the inner wall bridges the puncture or blown section retaining sufficient air pressure to keep the tire seated firmly on the rim and permit a safe landing. Dual seal tubes are used only in single nose wheel installations.

INTERCHANGEABILITY:

Tubes are made to size and must be used only with the corresponding size casing.



CHART EXPLANATION

TUBES

The following explanation applies to the charts on inner tubes only. These charts, which are made up of 10 columns of information, should answer most questions regarding Army and Navy inner tubes now in use.

COLUMN 1—SIZE.

The size as presented in the charts should be used without variation, as these inner tube dimensions are standard practice throughout the aircraft industry.

COLUMN 2—A. E. REFERENCE NUMBER.

This number is the identifying indication assigned by Materiel Command, Army Air Forces. It also indicates interchangeability of items as listed in the Aeronautical Equipment Reference Book of Component Parts published by Materiel Command.

COLUMN 3—TRA VALVE NUMBER.

This number identifies the type of valve used on the inner tube.

COLUMN 4—USE.

This column indicates whether the tube is currently used on a nose wheel, tail wheel, landing wheel, tail and nose wheel, or nose and landing wheel.

COLUMN 5—WEIGHT.

This is the maximum allowable weight for each tube. Usually the tube is lighter.

COLUMN 6—USED BY.

A—Army
N—Navy
B—British

COLUMN 7—AIR SERVICE COMMAND STOCK NUMBER.

This number is assigned by the Air Service Command, Army Air Forces.

COLUMN 8—AVIATION SUPPLY OFFICE STOCK NUMBER.

This number is used by the Aviation Supply office of the Naval Aircraft Factory in Philadelphia, and is the only reference number assigned by the Navy.

COLUMN 9—BRITISH REFERENCE NUMBER.

This number is assigned by the British and appears in the Vocabulary of American Equipment for the Royal Air Force.

COLUMN 10—MANUFACTURER.

Only the initials or abbreviation of the manufacturer's name appears in the charts; the full names are as follows:

GY—Goodyear Tire & Rubber Company—Akron, Ohio.

GR—B. F. Goodrich Company—Akron, Ohio.

GEN—General Tire & Rubber Company—Akron, Ohio.

US—United States Rubber Company—Detroit, Michigan.

FI—Firestone Tire & Rubber Company—Akron, Ohio.

FGS—Frank G. Schenuit Company—Baltimore, Maryland.

PH—Pharis Tire & Rubber Company—Newark, Ohio.

WA—Waber Company—Chicago, Illinois.

TUBES—SMOOTH CONTOUR—TYPE I

Tube Size	A. E. Reference Number	T. R. A. Valve Number	Use	Weight (Lbs.) (Maximum)		Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufactured By
				Reg.	Dual		Class	Serial			
8.00 S.C.	41-8852	TR 12	Tail	.50		A-N-B	3900	732000	R83-T-14110	127A/268	GY-GR-GEN-FI-US-WA
10.00 S.C.	41-9003	TR 12	Tail	.75		A-N-B	3900	733500	R83-T-14118	127A/39	GY-GR-GEN-FI-US-WA
12.50 S.C.	41-9153	TR 20	Tail	1.00		A-N-B	3900	735000	R83-T-14132	127A/14	GY-GR-GEN-FI-US-WA
14.50 S.C.	41-9303	TR 20	Tail	1.50		A-N-B	3900	736500	R83-T-14150	127A/489	GY-GR-GEN-FI-US-WA
17.00 S.C.	41-9452	TR 20	Tail	2.00		A-N-B	3900	738000	R83-T-14166	127A/269	GY-GR-GEN-FI-US-WA-FGS
19.00 S.C.		TR 20	Nose	2.75		A-N-B	3900	739500	R83-T-14186	127A/11	
19.00 Dual Seal SCA	41-7452	AN-I-14 Fig. No. 3	Nose		6.00	A-B	3900	810200		127A/87	FI
23.00 S.C.	41-7804	TR 35	Nose or Tail	3.75		A-N-B	3900	741000	R83-T-14210	127A/248	GY-GR-GEN-FI-US-WA
23.00 Dual Seal SCA	41-7803	AN-I-14 Fig. No. 3	Nose		10.00	A-B	3900	810350		127A/185	GR
26.00 Dual Seal SCA	41-7953	AN-I-14 Fig. No. 3	Nose		13.00	A-N-B	3900	810500	R83-T-16993	127A/88	FI
26.00 S.C.	41-7954	TR 350	Nose	4.50		A-N-B	3900	742500	R83-T-14230	127A/501	GY-GR-GEN-FI-US-WA
27 S.C., H.D.	41-5604	TR-25	Landing	5.00		A-N-B	3900	744000	R83-T-13810	127A/503	GY-GR-GEN-FI-US-WA-FGS-PH
27 Dual Seal SCB	41-8101	AN-I-14 Fig. No. 3	Landing		13.00	A-B	3900	810650		127A/100	GR-FI
30 S.C.	41-6054	TR 25	Landing	7.00		A-N-B	3900	745500	R83-T-13824	127A/505	GY-GR-GEN-FI-US-WA-FGS-PH
30 Dual Seal SCB	41-8252	AN-I-14 Fig. No. 3	Nose		16.00	A-N-B	3900	810800	R83-T-16980	127A/183	GR-FI
33 S.C.	41-6353	TR 25	Landing	8.50		A-N-B	3900	748000	R83-T-13836	127A/256	GY-GR-GEN-FI-US-WA
33 Dual Seal SCB	41-8401	AN-I-14 Fig. No. 3	Nose		20.00	A-N-B	3900	810950	R83-T-16985	127A/177	GR-FI
36 S.C.	41-6654	TR 350	Landing	10.50		A-N-B	3900	749500	R83-T-13844	127A/507	GY-GR-GEN-FI-US-WA-PH
36 Dual Seal SCB	41-8551	AN-I-14 Fig. No. 3	Landing		25.00	A-N-B	3900	811100	R83-T-16990	127A/103	GY-GR-FI
39 S.C.	41-8710	TR 350	Landing or Nose	12.50		A-N-B	3900	752000			GY-GR-GEN-FI-US-WA
39 Dual Seal SCB	41-8702	AN-I-14 Fig. No. 3	Nose		30.00	A-B	3900	811250		127A/132	WA
44 Dual Seal SCB	41-8777	AN-I-14 Fig. No. 3	Nose		38.00	A					GY
44 S.C.	41-6853	TR 350	Landing	16.00		A-N-B	3900	753500	R83-T-13860	127A/509	GY-GR-GEN-FI-US
47 S.C.	41-6904	TR 350	Landing	22.00		A-N-B	3900	755500	R83-T-13866		GY-GR-GEN-FI-US-WA-PH
47 Dual Seal SCB	41-1853	AN-I-14 Fig. No. 3	Nose		43.00	A-B					
51 Dual Seal SCB	41-2003	AN-I-14 Fig. No. 3	Nose		58.00	A					
51 S.C.	41-2014	TR 350	Landing	26.00		A-B					
56 S.C.	41-7253	TR 75	Landing	37.00		A-N-B	3900	758500	R83-T-13892	127A/17	GY-GEN-FI-GR-US
56 S.C. (Style D)	41-7257	TR 93C	Landing	37.00		A-B	3900	758000		127A/98	GY-GR-GEN-FI-US-PH
56 Dual Seal SCB	41-2024	AN-I-14 Fig. No. 3	Nose		94.00	A	3900	811400			
65 S.C.	41-7423	TR 100	Landing	61.00		A-B				127A/260	GR
65 S.C. (Style D)	41-7427	TR 191	Landing	61.00		A					GR-FI
110 S.C.	41-7443		Landing			A					GY

SPECIFICATION: AN-I-14

(REVISED 1 JULY 1944)

When procuring or requisitioning material consult the current applicable stock publication

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TUBES—HIGH PRESSURE—TYPE II

Tube Size	A. E. Reference Number	T. R. A. Valve Number	Use	Weight (Lbs.)	Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufactured By
						Class	Serial			
10 x 3	41-1203	TR-43	Nose or Tail	.50	A-N-B	3900	512000	R83-T-12850	127A/115	FI-GR-US-WA
26 x 6	41-5455	TR-115	Landing	3.00	A-N-B	3900	532500	R83-T-12570	127A/9	GY-GR-FI-US-GEN
30 x 5		TR-63	Landing	3.00	A-N-B	3900	534000	R83-T-12600		FI-GY-US
30 x 7	41-1614	TR-115	Landing	4.50	A-N-B	3900	535500	R83-T-12620	127A/41	FI-GY-US-GEN-GR-WA
32 x 6		TR-63	Landing	4.00	A-N-B	3900	537000	R83-T-12650		FI-GR
32 x 8	41-6253	TR-250	Landing	5.50	A-N-B	3900	537500	R83-T-12660	127A/209	GR-GY-FI-US-GEN-WA
34 x 9	41-6504	TR-250	Landing	7.50	A-N-B	3900	539000	R83-T-12690	127A/69	GR-GY-FI-GEN-US-WA-FGS
36 x 8		TR-63	Landing	5.60	A-N-B	3900	541000	R83-T-12706		FI-US

SPECIFICATION: AN-I-14

NOTE: The 10½ x 4, 12½ x 4½, 14½ x 5 and 24 x 7.7 High Pressure Sizes, have been re-designated "Extra High Pressure, Type VIII"

TUBES—LOW PRESSURE—TYPE III

5.00-4	41-1003	TR-67	Nose or Tail	1.25	A-N-B	3900	500300	R83-T-13320	127A/215	FI-GEN-GR-FGS-US-WA
6.00-6	41-1014	TR-20	Landing	2.00	A-N	3900	501500	R83-T-13326		FI-GEN-GY-GR-FGS-US-WA
6.50-10	41-1024	TR-25	Landing	4.00	A-N-B	3900	503000	R83-T-13354	127A/113	FI-GEN-GR-US-WA
7.00-5	41-1033	TR-68	Nose or Tail	2.25	A-B					GEN-GR-US-WA
7.00-6	41-5003	TR-20	Landing	2.00	A-N-B	3900	504500	R83-T-13390	127A/292	GR-FI-GY-WA
7.50-10	41-5303	TR-25	Landing	4.50	A-N-B	3900	505500	R83-T-13410	127A/249	GR-WA-GY-FI-US-GEN
8.00-4	41-1044	TR-12	Landing	2.25	A-N-B	3900	506500	R83-T-13430	127A/265	FI-GEN-GR-FGS-US-WA
8.00-5	41-1053	TR-68	Nose or Tail	2.60	A-N-B	3900	507500	R83-T-13460	127A/109	FI-GEN-GR-GY-WA
8.50-10	41-5205	TR-25	Landing	4.80	A-N-B	3900	508500	R83-T-13468	127A/252	GR-FGS-GY-US-FI-GEN-WA
8.90-12.50	41-5153	TR-15	Landing	5.50	A-N-B	3900	509500	R83-T-13620	127A/255	GR-GY-US-GEN-FI-WA
9.00-6	41-1063	TR-69	Nose or Tail	3.20	A-N-B	3900	510500	R83-T-13480		FI-GEN-GR-GY-US-WA-FGS
10.00-7	41-9752	TR-350	Tail	6.00	A-N-B			R83-T-13496		GR-US-WA-FI-GEN
15.00-16 (Drop Center)	41-1224	TR-94	Landing	17.50	A-N-B	3900	516500			WA-GR-US-FI
15.00-16 (Flat Base)	41-1234	TR-99	Landing	17.50	A	3900	518000			WA-GR-US-FI
15.50-20	41-1244	TR-92	Landing	20.00	A-N-B	3900	519000	R83-T-13540		GR-GY-WA
16.00-16	41-1264	TR-92	Landing	17.50	A-N-B	3900	521000	R83-T-13548	127A/511	FI-GEN-GR-GY-US-WA-PH
17.00-16	41-1274	TR-93	Landing	20.00	A-N-B	3900	524500	R83-T-13556		FI-GEN-GR-GY-US-WA
17.00-20	41-6953	TR-92	Landing	23.00	A-N-B	3900	525000	R83-T-13562	127A/259	GY-FI-US-GR-WA-PH
18.00-16	41-1294	TR-265	Landing	19.00	A-N-B	3900	526500	R83-T-13580		GR-GY-WA
19.00-23	41-7104	TR-98	Landing	31.00	A-N-B	3900	528000	R83-T-13580	127A/94	GY-FI-US-GR-WA-GEN-PH
20.00-18	41-1404	TR-93	Landing	24.00	A-B	3900	530500			GR

SPECIFICATION: AN-I-14

(RESTRICTED)

TUBES—EXTRA LOW PRESSURE—TYPE IV

Tube Size	A. E. Reference Number	T. R. A. Valve Number	Use	Weight (Lbs.)	Used By	Air Service Command Stock Number		Aviation Supply Office Stock Number	British Reference Number	Manufactured By
						Class	Serial			
12 x 5-3	41-1213	TR-260	Nose or Tail	1.50	A-N-B	3900	514000	R83-T-12020	127A/3	GY-WA
16 x 7-3	41-1253	TR-261	Nose or Tail	2.00	A-N-B	3900	519750	R83-T-12030	127A/220	WA
18 x 8-3	41-1283	TR-261	Nose or Tail	2.50	A-B	3900	525500			GY-WA
29 x 13-5	41-1444	TR-262	Landing	6.50	A-N-B	3900	533000	R83-T-12090		GR-WA
30 x 13-6	41-1634	TR-262	Landing	7.00	A-N-B	3900	536000	R83-T-12100	127A/216	GY-US-WA
35 x 15-6	41-1654	TR-262	Landing	9.20	A-N-B	3900	540000	R83-T-12110	127A/147	GY
45 x 20-10	41-1834	TR-264	Landing		A-N-B	3900	543500	R83-T-12120		GY

SPECIFICATION: AN-I-14

TUBES—STREAMLINE (OBSOLETE)—TYPE V

24		TR-15	Landing	3.50	A-N-B	3900	904500	R83-T-14420		
27		TR-25	Landing	4.00	A-N-B	3900	905500	R83-T-14430	127A/12	
31		TR-25	Landing	5.25	A-N-B	3900	906500	R83-T-14440		
45		TR-350	Landing	13.80	A-N-B	3900	909500	R83-T-14470		

SPECIFICATION: 20-115

TUBES—LOW PROFILE—TYPE VI

19.00 x 6.80-10	41-7502	TR-150	Nose	2.50	A	3900	527000			FI-US-WA
22 x 7.25-11.50	41-7602	TR-150	Nose	3.50	A-N	3900	531000	R83-T-13700		FI-US-GR
26 x 9.00-13	41-1433	TR-150	Nose	5.00	N					FI-WA
33 x 11.50-16.50	41-1643	TR-150	Nose	8.25	N			R83-T-15020		FI-WA

SPECIFICATION: AN-I-14

TUBES—EXTRA HIGH PRESSURE—TYPE VII

10½ x 4	*41-9052	TR-88	Nose or Tail	1.00	A-N	3900	513250	R83-T-12860		GY-GR-GEN-US-FI-FGS-WA
12½ x 4½	*41-9187	TR-89	Landing	1.30	A-N-B			R83-T-12870	127A/245	GY-GR-GEN-US-FI-FGS
14½ x 5	*41-9352	TR-185	Landing	2.50	A-N-B	3900	515500	R83-T-12885	127A/246	GR-GEN-US-FI-WA
24 x 7.7	*41-7813	TR-25	Landing		A					WA-GY-GEN-US-FI
26 x 6.6	41-6659	TR-15	Landing	3.00	A-N					GY-FI-US
30 x 7.7	41-1624	TR-15	Landing	4.50	A-N			R83-T-12630		FI-US-GR-WA
32 x 8.8	41-6289	TR-25	Landing	5.50	A					GR-FI-US-WA-PH
34 x 9.9	41-6605	TR-25	Landing	8.00	A-N			R83-T-12698		GY-FI-GR-US-WA-PH
36 x 11	41-1664	TR-93 (1)	Landing	8.50	A-N			R83-T-12708		GR-GY-WA
38 x 11	41-1674	TR-93 (1)	Landing	9.50	A-N					
40 x 12	41-1804	TR-91 (2)	Landing	12.50	A-N					GY-US
42 x 12	41-1814	TR-91 (2)	Landing	13.50	A-N					WA
44 x 13	41-1824	TR-91 (2)	Landing	18.50	A-N					WA
46 x 14	41-1844	TR-96 (2)	Landing	24.00	A-N					WA

NOTES: (1) Special—With 40° Bend
 (2) Special—With 45° Bend
 (3) Special—With 50° Bend

SPECIFICATIONS: AN-I-14

*Formerly known as High Pressure, Type II

(REVISED 1 JULY 1944)

When procuring or requisitioning material consult the current applicable stock publication

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