

## PASSENGER CARS

ECLIPSE MACHINE CO., ELMIRA, N. Y.  
BENDIX-ECLIPSE OF CANADA, LTD., WALKERVILLE, ONT., CAN.  
(SUBSIDIARIES OF BENDIX AVIATION CORP.)

## PASSENGER CARS

YEAR MODEL STARTING MOTOR DRIVE PLATE

## ESSEX

1924-25 ..... 6 Bos 940, 944, 946 ..... LC10Y ☐  
1925-26 Start En-  
gine 279727.6 Cyl. Bos 948, 964 ..... LC10Z ☐  
1926-28 ..... A-L MU 4001, MU 4001A,  
MZ 4005 ..... LC10Z ☐  
\*Sept. 1st, 1928-29 A-L MZ 4014 ..... L10-9 ☐  
\*1930..Start En-  
gine No. 1236603 A-L MZ 4017 ..... LCC10-9 ☐  
\*Late 1930-32 ... A-L MAJ 4009 ..... LC11X-10 ☐  
\*1931 ..... A-L MZ 4017 ..... LCC10-9 ☐  
1931-32 ..... A-L MAJ 4025 ..... LC11X-10 ☐  
1932 Terraplane 6 A-L MAJ 4028 ..... LCD11X-10 ☐  
1933 Terraplane 6 A-L MAJ 4031 ..... A1588 ☐  
†1933 Terraplane 8 A-L MAB 4051 ..... LCD11X-10 ☐  
1933 Terraplane 8 A-L MAB 4052 ..... A1588 ☐  
\*L10-9, LCC10-9, LC11X-10 are not interchangeable  
†Use A1588 for service in place of LCD11X-10.

## FALCON-KNIGHT

1927-28 ..... A-L ML 4106 MAB  
4002, MAB 4004 ..... L11X ☐

## FLINT

1923 ..... A-L MN 4006 ..... L11X ☐  
1923-25 ..... 6-55 De Jon SA 4001 ..... L11X ☐  
1924-25 ..... 6-40 A-L MG 4004, MG 4101 ..... L11 ☐  
1926-27 ..... 60 A-L MN 4111 ..... L11X ☐  
1926-27 ..... 80 A-L MN 4110 ..... L11X ☐  
1926-27 ..... Jr. A-L MP 4102 ..... R11X ☐

## FORD

1919-27 ..... T Liberty FA & Own ..... L10FA ☐  
Before Oct. 1928 A Own ..... LCA-10 ☐  
Oct. 1928 to  
Early 1932 ... A Own ..... L11X-10 ☐  
1932-33 ..... 4, 8 Own ..... L11FX-10 ☐

## FRANKLIN

1922-23 ..... N-E 3936 ..... LF10X ☐  
1923-24 ..... A-K 6558 ..... LF10X ☐  
1924-25 ..... Dyn DG 643 ..... LF10X ☐  
1926-28 ..... Dyn DH 696 ..... LF10X ☐  
1929-33 ... 6 Cyl. D-R 723C ..... L10XTF ☐  
1932-33 ... 12 Cyl. D-R 545 ..... R11X ☐

## FRONTENAC

1931 ..... A-L MAB 4037 ..... R11X-10 ☐

## GARDNER

1920-22 ..... Westg 100, 33 AB ..... L11-12 ☐  
1922-25 ..... Westg 100 ..... R11 ☐  
1925-26 ..... 6 & 8 D-R 720J, 720Q ..... R11X ☐  
1927-29...75, 85,  
120, 125 ..... D-R 716A ..... R11XV ☐  
1927-29.90, 95, 130 D-R 720YX, 720Y ..... R11X ☐  
1929-31...125, 136,  
140, 148, 150... D-R 716A ..... R11XV ☐  
1929-31 ...150, 158 D-R 720YX, 720V ..... R11X ☐

## GOTFREDSON

1925-26 .... Taxi D-R 720E ..... R11X-13 ☐

## GRAHAM-PAIGE

1928 ..... 610 N-E 6470 ..... L10 ☐  
1928...614, 619, 629 N-E 6460, 6462 ..... R10XD ☐  
1929-30 ... 41, 612 D-R 713K ..... L11-10 ☐  
1929-30 ..... 615 D-R 718E ..... R11X-10 ☐

YEAR MODEL STARTING MOTOR DRIVE PLATE

## GRAY

1922-25 ..... Westg 33 AB ..... L11 ☐  
1925-26 ..... A-L MO 4104 ..... L11 ☐

## HCS

1920-24 ..... Delco 185 ..... L11X ☐  
1924-26 ..... Taxi Bos 952 ..... R11 ☐  
1927 ..... Taxi D-R 712E ..... R11X ☐

## HAYNES

1918-23 ..... L-N 186M, 318M, 380M... R13X ☐  
1923-25 ..... L-N 447M ..... R11X ☐

## HENNEY (HEARSE)

1920-21 ..... GD 514 ..... R11 ☐  
1921-22 ..... Westg 100 ..... R11-12 ☐  
1923 ..... Bos 910, 934 ..... R11 ☐  
1923-24 ..... Bos 1117, 913 ..... R11X ☐  
1924 ..... Bos 1118 ..... R11X GD Hd. ☐  
1924 ..... Bos 1116 ..... R11X-13 GD Hd. ☐  
1925 ..... Bos 961 ..... R11 ☐  
1925 ..... A-L MN 4101 ..... R11X ☐  
1927-28 ..... A-L MUA 4003 ..... R-10XD ☐  
1929-32 ..... D-R 718A ..... R11X ☐  
1929-32 ..... D-R 716C, 722P ..... R11XV ☐  
1932 ..... Export D-R 724W ..... R11XV ☐

## HERTZ

1925-28 ..... Delco 240, 286, 313 ..... R11X ☐

## HUDSON

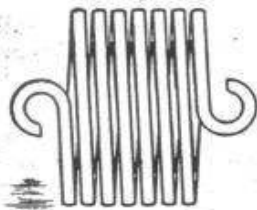
1930-31 ..... A-L MAD 4110, MAB  
4034 ..... L11X-10 ☐  
1931 Beginning  
Eng. No. 52730 A-L MAB 4034 ..... LC11X-10 ☐  
1932-33 ..... 6, 8 A-L MAJ 4025, MAB 4041  
..... LC11X-10 ☐

## HUPMOBILE

1920-25 ..... R Westg 33 AB ..... L11-12 ☐  
1925 ..... 8 Cyl. Westg 59AO ..... L11X ☐  
1925, Eng. 12500  
8 Cyl. A-L MR 4101 ..... L11XV ☐  
1925-29 ..... 6 Cyl. A-L MN 4109 ..... L11X ☐  
1926 ..... 6 Cyl. A-L MN 4107 ..... L11X ☐  
1926-29 ... 8 Cyl. A-L MR 4101, ML 4139 L11XV ☐  
1929-31 ... 6 Cyl. A-L MAC 4221, MAJ  
4003 ..... L11X-10 ☐  
1929-31 ... Big 8 A-L MR 4102 ..... R11XV ☐  
1929-31...Small 8 A-L MAB 4021, MAD 4113  
..... R10XD ☐  
1932-33 ... 6 Cyl. A-L MAJ 4003, MAB 4050  
..... L11X-10 ☐  
1932-33 ... 8 Cyl. A-L MAB 4042, MAD 4118  
..... R10XD ☐

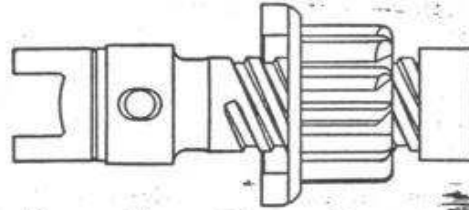
## JEWETT

1922-24 ..... D-R 721A, 713 AC ..... L11X ☐  
1925-26 ..... D-R 711E, 713C, 713F ... L11X ☐  
1927, See Paige 6-45



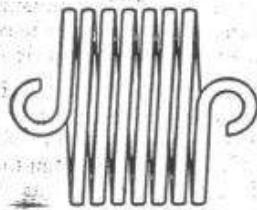
RIGHT-HAND SPRING

"R"



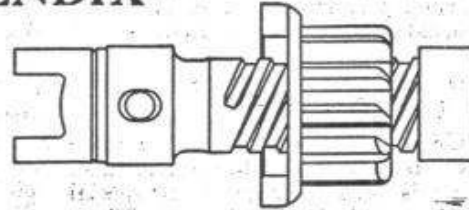
RIGHT-HAND SCREW THREADS

## BENDIX



LEFT-HAND SPRING

"L"



LEFT-HAND SCREW THREADS

## Designation

### "R" and "L"

In designating, or numbering the various types of the Bendix Drive, either the letter "R" or "L" is used as a prefix before the figure or number. The prefix "R" is used when the screw threads and the spring coils are right-hand, likewise, the prefix "L" is used when the screw threads and the spring coils are left-hand. In other words, "R" means "RIGHT-HAND" and "L" means "LEFT-HAND". See illustration above.

All component parts of the Bendix Drive, which can be interchangeably used on corresponding types of both "Right-Hand" and "Left-Hand" drives are always designated with the prefix "R". This applies to drive heads, shaft and head spring screws, lock washers and sleeves.

### How To Distinguish Between a Left Hand and Right Hand Spring



Fig. 1



Fig. 2

Place the spring in front of you with the eyelets toward you. **Crank** your index finger, as shown in

the accompanying illustrations, to conform with the *upper* eyelet. If it takes the index finger of your *left* hand to conform with the eyelet, as shown in figure 1, it is a *left-hand spring*. If it takes the index finger of your *right* hand, as shown in figure 2, it is a *right-hand spring*.

### How To Distinguish Between a Left Hand and Right Hand S. A. Assembly



Fig. 3

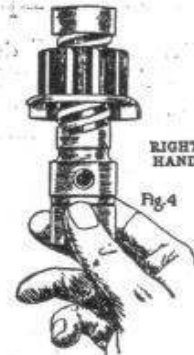


Fig. 4

Grasp the S. A. Assembly where the spring attaches, and revolve pinion up or forward. If it revolves over to the left as shown in figure 3, it is a *left-hand drive*. If it revolves over to the right, as shown in figure 4, it is a *right-hand drive*. Note on the left-hand S. A. Assembly shown in figure 3, that the threads wind forward to the left, and that the pinion teeth are chamfered off on the *left-hand corner*. On the *right-hand S. A. Assembly*, shown in figure 4, just the opposite is true.

These same tests can be applied to distinguish between right-hand and left-hand complete Bendix Drives.

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## "13" "11" "10"

These numbers have been generally used in addition to the "R" and "L" described as designation of particular types of the Bendix Drive. As such they refer to the number of teeth (8-10 pitch) in the pinion or small counterweighted gear regularly used. Thus an R13 is a Bendix Drive with Right-Hand Thread and Spring carrying a pinion of thirteen teeth, 8-10 pitch, 20 degrees pressure angle; and L11 is a Bendix Drive with Left-Hand Thread and Spring, carrying a pinion of eleven teeth, 8-10 pitch, 20 degrees pressure angle.

## "X", "XX", "XXX"

An "X" added to the designation of a drive such as "R11-X" means that a spring heavier than a regular spring is used on account of special heavy service on the particular installation. Where requirements demand it springs of greater load capacity are used and are designated "XX" or "XXX" accordingly.

The R13 or L13 (length overall 6-7/16" which applies to both regular and "X" types) is mounted on an armature shaft .802" (nearly 13/16") in diameter and is used where such a large starting motor is required.

The R11 or L11 (length overall 5 1/4" which applies to both regular and "X" types) is mounted on a shaft 5/8" in diameter and is the size of drive for general purpose work, most commonly used.

The R10 or L10 (length overall 5 1/4" which applies to both regular and "X" types) is mounted on a shaft 1/2" in diameter and is used where special conditions warrant this size drive.

The "10XX" and "11XX" types mount on a 1/2" or 5/8" diameter shaft respectively but are 5 3/4" length overall and are not interchangeable with other types.

Due to the size and construction of the "13XXX" type, which is 6-7/16" length overall and mounts on an armature shaft .747" (approximately 3/4" in diameter) it can only be used where the installation is laid out to accommodate this size drive.

Where a special pinion is to be used on a standard type of drive this may be indicated by an addition, thus a Left-Hand "11" size (L11) with heavy spring (X) carrying a ten-tooth 7/9 pitch pinion would be designated as "L11X-10-7/9 Pitch."

## Special Types

Special types of the Bendix Drive have been designed and furnished for special installations where regular types are not applicable; but in general these bear the same characteristics as the regular and follow the same general laws of action. Correspondence relating to such special types should always indicate name and year of the installation; also the make and type number of starting motor and all identification marks possible.

## A Brief Explanation of Bendix Drive Type Numbers

"R" and "L" denoting right hand and left hand, "13", "11" and "10" designating the various sizes and "X" as specifying a spring which is heavier than the regular, are terms previously discussed. It may be of interest and assistance to you to briefly explain the general group characteristics and also the special features of various drives shown in this catalog.

Broadly speaking, practically all Bendix drives could be referred to as stub screw types because they are located longitudinally on the starting motor armature shaft by a pilot on the head spring screw, which fits into a shallow hole in the armature shaft, and have the drive head keyed to the armature shaft by a Woodruff key.

Disregarding this general method of locating the drive, there are certain basic structural features which are sufficiently characteristic of all drives associated with the various groups to classify them as such, even though several drives in any one group vary in detail construction or may have certain features applicable to other groups.

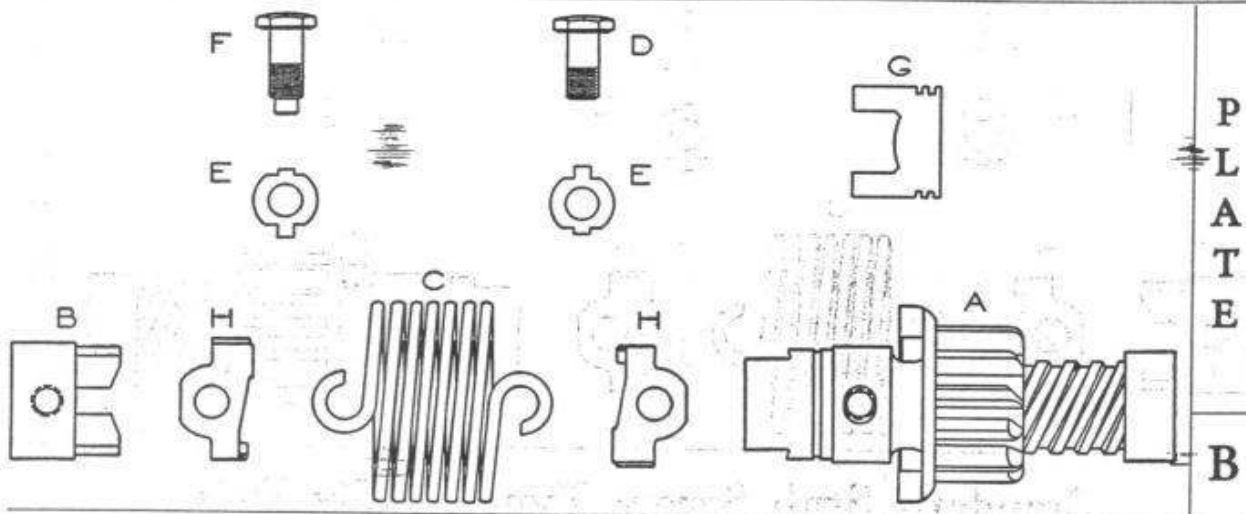
### Standard Stub Screw Types

Drives in this group represent the standard form of Bendix drive structure. They may mount on a 1/2", 5/8", or .802" diameter armature shaft, using a regular "X" or "XX" type spring of conventional design with 5/16" (except 13 type) diameter loop eyes, and in all instances have the standard anti-drift device consisting of a drift pin and spring incorporated in the pinion counterweight. The following drives described are some of the standard stub screw types:

#### L10

Standard "10" type left hand drive with standard head (R10-105) having 1/2" hole. Do not

confuse this with the "L10FA" type having the special long and ground stop nut as used on Ford model "T". Used on various installations.



P  
L  
A  
T  
E  
  
B

## Standard Stub Screw Type Bendix Drive

Parts Illustrated Are Typical Only. Letters Are Key Designation Referring to Data Below.

### Component Parts and List Prices (Left Hand Types)

Bendix Drive Number	A S-A Assembly	B Driving Head	C Driving Spring	D Shaft Spring Screw	E Lock Washer	F Head Spring Screw	G Sleeve	H Spring Clip
L10 .....	L10-SA \$7.50	R10-105 \$5.50	L10-6 \$.45	R12-7 \$.10	R12-8 \$.01	R10-109 \$.10	R10-112R \$.30	None
*L10FA .....	L10FA-SA 7.50	R10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	R10-109 .10	R10-112R .30	None
*L10XD .....	L10XD-SA 7.50	SR10-105 .50	L11-6X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 \$.07
L10XTF .....	L10XTF-SA 7.50	R10-105A .75	L11-6X .55	R11-7X .10	R12-8 .01	R10-109XF .10	R10-112R .30	L11-21 .07
*L10-9 .....	L10-9-SA 7.50	R10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	R10-109 .10	R10-112R .30	None
*L11 .....	L11-SA 7.50	SR10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	SR10-109 .10	R11-112R .30	None
L11X .....	L11X-SA 7.50	SR10-105 .50	L11-6X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 .07
*L11XV .....	L11XV-SA 7.50	SR10-105 .50	L11-6X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 .07
L11X-10 .....	L11X-10-SA 7.50	SR10-105 .50	L11-6X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 .07
*L11-10 .....	L11-10-SA 7.50	SR10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	SR10-109 .10	R11-112R .30	None
*L11X-10 7-9 Pitch .....	L11X-10-7-9-SA 7.50	SR10-105 .50	L11-6X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 .07
*LB11XX .....	L11X-SA 8.00	RB11-105 .75	LB11XX-6 1.00	R11XX-7 .10	R12-8 .01	R11XX-109 .10	R11-112R .30	L11-21 .07
*L11-12 .....	L11-12-SA 7.50	SR10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	SR10-109 .10	R11-112R .30	None
*L11-13 .....	L11-13-SA 7.50	SR10-105 .50	L10-6 .45	R12-7 .10	R12-8 .01	SR10-109 .10	R11-112R .30	None
*L11X-13 .....	L11X-13-SA 7.50	SR10-105 .50	L11-6-X .55	R11-7X .10	R12-8 .01	R11-109X .10	R11-112R .30	L11-21 .07
*LB11XX-13 .....	L11X-13-SA 8.00	RB11-105 .75	LB11-XX6 1.00	R11XX-7 .10	R12-8 .01	R11XX-109 .10	R11-112R .30	L11-21 .07
*L13MX .....	L13M-SA 8.00	R13M-105 .75	L13-6X .55	R13-7X .10	R13-8 .01	R13XX-9 .10	R13M-112R .50	None

\*Do not stock. Order from Factory only as required.

The Trade-Mark "BENDIX" is on Each Genuine Part



## Genuine Springs of Superior Quality

### Plainly Stamped for Your Protection

Like all other genuine Bendix Drive replacement parts, the driving spring is now plainly stamped with the name "BENDIX" on one of the loop eyes, which identifies the genuine spring and protects you and your customer from inferior substitutes. Genuine parts for the Bendix Drive are the product of the highest mechanical skill and long experience. They are the result of special equipment, unceasing care and attention—and countless inspections.

In our experience we have found that none but a genuine part will give you our standard of satisfactory dependable service.

"R" or "L" prefixed to part number indicates right or left hand coils.

When replacing a spring, carefully note dimensions as given in the table. The regular and "X" type springs, even when used on Bendix Drives otherwise identical are not interchangeable unless

the corresponding spring fastening screws are also used.

In Figure 2 is shown the new and improved "F" type of spring having the specially formed end coils and requiring  $3/8"$  diameter screws instead of  $5/16"$ . This new form of construction not only greatly increases the safety factors for preventing screw breakage but also adds to the efficiency of the drive through longer spring life.

Another new type of spring known as the "H" type of construction is shown in Figure 3. Although it also has the same size and specially formed end coils as the "F" type you will observe in addition that the loops are located at 180 degrees in relation to each other.

Due to their construction neither the "F" nor "H" types of springs are interchangeable with any other type of Bendix spring, therefore do not attempt it.

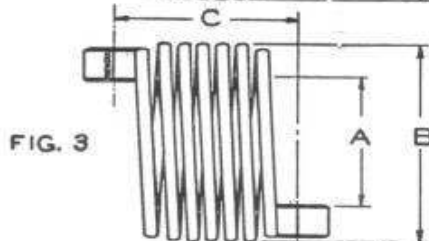
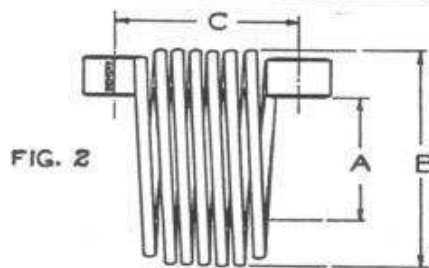
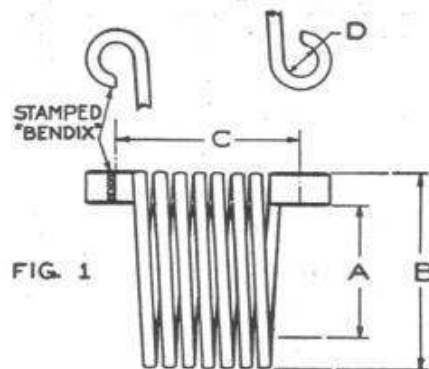


Fig.	Bendix Spring Part No.	Inside Diameter	Outside Diameter	Length	Diameter of Screws	Number of Coils
		A	B	C	D	
1	R10-6	$1\frac{1}{8}"$	$1\frac{1}{4}"$	$1\frac{3}{4}"$	$\frac{5}{16}"$	7
1	L10-6	$1\frac{1}{8}"$	$1\frac{1}{4}"$	$1\frac{3}{4}"$	$\frac{5}{16}"$	7
1	LA10-6	$1\frac{1}{8}"$	$1\frac{1}{4}"$	$1\frac{3}{4}"$	$\frac{5}{16}"$	7
1	R11-6X	$1\frac{1}{8}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{5}{16}"$	7
1	L11-6X	$1\frac{1}{8}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{5}{16}"$	7
1	RB11XX-6	$1\frac{1}{8}"$	$2\frac{1}{8}"$	$2\frac{1}{4}"$	$\frac{5}{16}"$	8
1	LB11XX-6	$1\frac{1}{8}"$	$2\frac{1}{8}"$	$2\frac{1}{4}"$	$\frac{5}{16}"$	8
2	R11F-6	$1\frac{1}{4}"$	2"	$1\frac{3}{4}"$	$\frac{3}{8}"$	7
2	L11F-6	$1\frac{1}{4}"$	2"	$1\frac{3}{4}"$	$\frac{3}{8}"$	7
2	R11F-6X	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{3}{8}"$	7
2	L11F-6X	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{3}{8}"$	7
2	RB11F-6XX	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$2\frac{1}{4}"$	$\frac{3}{8}"$	8
2	LB11F-6XX	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$2\frac{1}{4}"$	$\frac{3}{8}"$	8
3	R11H-6	$1\frac{1}{4}"$	2"	$1\frac{3}{4}"$	$\frac{3}{8}"$	$6\frac{1}{2}$
3	L11H-6	$1\frac{1}{4}"$	2"	$1\frac{3}{4}"$	$\frac{3}{8}"$	$6\frac{1}{2}$
3	R11H-6X	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{3}{8}"$	$6\frac{1}{2}$
3	L11H-6X	$1\frac{1}{4}"$	$2\frac{1}{8}"$	$1\frac{3}{4}"$	$\frac{3}{8}"$	$6\frac{1}{2}$
1	R13-6	$1\frac{3}{8}"$	$1\frac{1}{2}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	8
1	L13-6	$1\frac{3}{8}"$	$1\frac{1}{2}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	8
1	R13-6X	$1\frac{3}{8}"$	$2\frac{1}{8}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	8
1	L13-6X	$1\frac{3}{8}"$	$2\frac{1}{8}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	8
1	R13-6XX	$1\frac{3}{8}"$	$2\frac{1}{8}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	7
1	RC13XXX-6	$1\frac{3}{8}"$	$2\frac{3}{8}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	7
1	LC13XXX-6	$1\frac{3}{8}"$	$2\frac{3}{8}"$	$2\frac{1}{8}"$	$\frac{3}{8}"$	7

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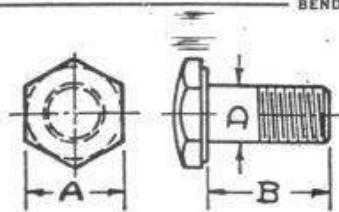


FIG. 1

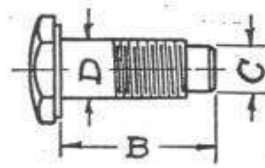


FIG. 2

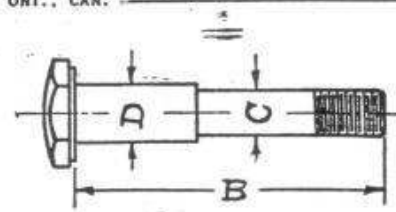


FIG. 3

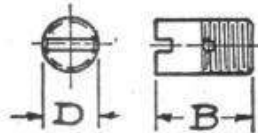


FIG. 4

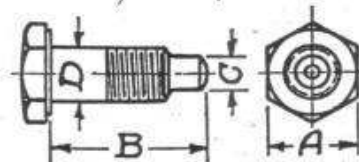


FIG. 5

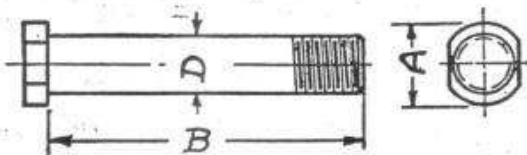


FIG. 6

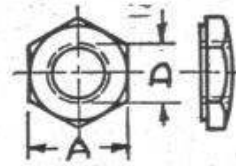


FIG. 7

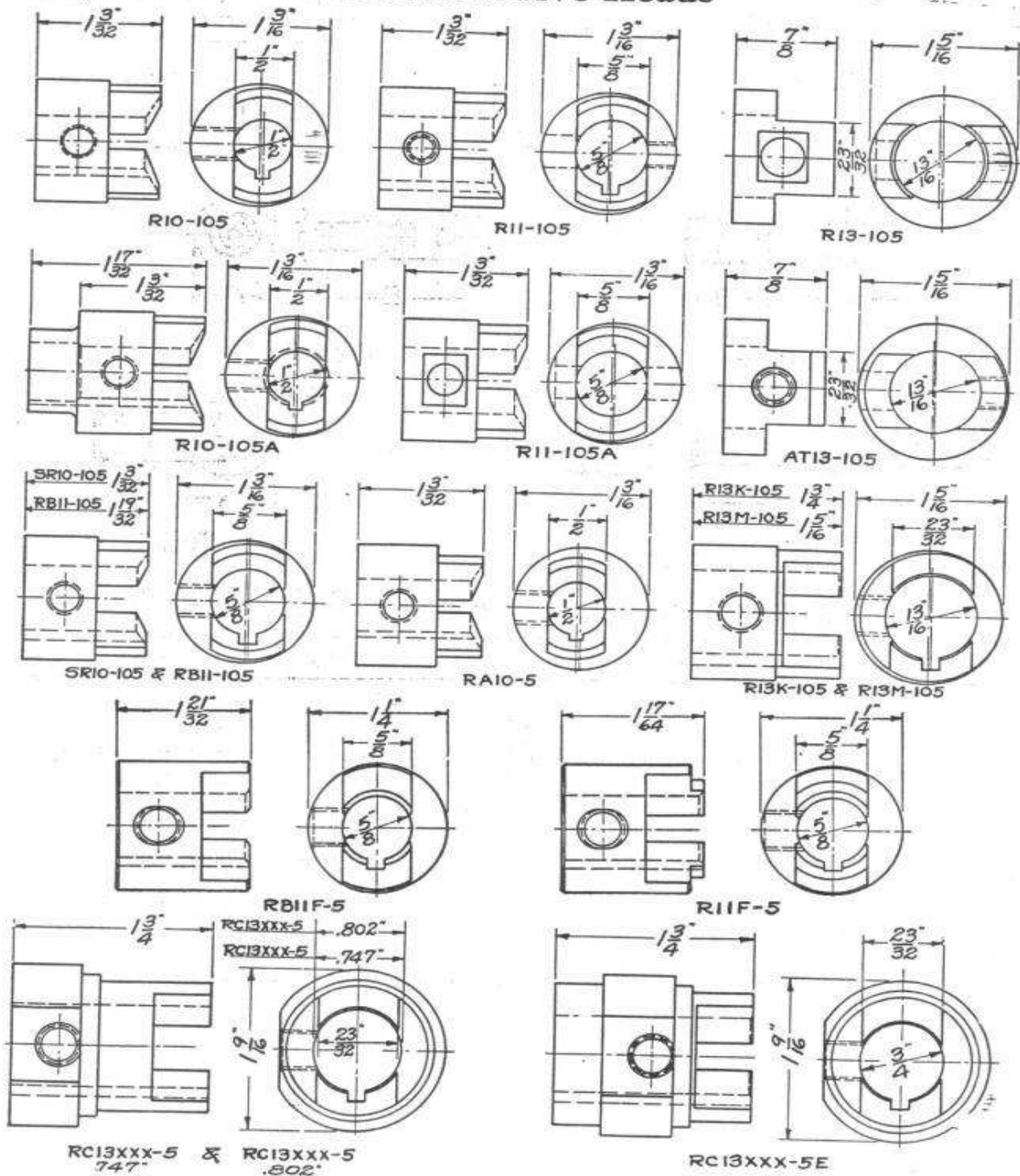
## Genuine Bendix Drive Screws, Bolts and Nuts

	Part No.	Fig.	A	B	C	D		Part No.	Fig.	A	B	C	D
Shaft	RCA10-7	4		$\frac{1}{8}$		$\frac{1}{8}$	Thru Bolts	AT12-9	3	$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{8}$
	R11-7X	1	$\frac{1}{2}$	$1\frac{1}{8}$		$\frac{1}{8}$		AT13-9	3	$\frac{5}{8}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{3}{8}$
	R11XX-7	1	$\frac{1}{2}$	$\frac{3}{8}$		$\frac{1}{8}$							
	R11F-7	1	$\frac{5}{8}$	$\frac{5}{8}$		$\frac{3}{8}$							
	R11F-7X	1	$\frac{5}{8}$	$1\frac{1}{8}$		$\frac{3}{8}$							
	R11F-7XX	1	$\frac{5}{8}$	$\frac{3}{8}$		$\frac{3}{8}$							
	R12-7	1	$\frac{1}{2}$	$\frac{5}{8}$		$\frac{1}{8}$							
	R13-7	1	$\frac{5}{8}$	$\frac{1}{8}$		$\frac{3}{8}$							
	R13-7X	1	$\frac{5}{8}$	$\frac{3}{8}$		$\frac{3}{8}$							
	R13-7XX	1	$\frac{5}{8}$	$4\frac{5}{16}$		$\frac{3}{8}$							
Screws	RC13XXX-7	1	$\frac{5}{8}$	$1\frac{1}{8}$		$\frac{3}{8}$	Nuts	R12-10	7	$\frac{1}{2}$	$\frac{3}{8}$		$\frac{1}{8}$
								R13-10	7	$\frac{5}{8}$	$\frac{1}{8}$		$\frac{3}{8}$
	RA10-9	5	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$							
	SR10-109	2	$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{8}$							
	R10-109	2	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{8}$	$\frac{1}{8}$							
	R10-109XF	2	$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$							
	R11-109X	2	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$							
	R11XX-109	2	$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{8}$							
	R11F-9	2	$\frac{5}{8}$	$1\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$							
	R11F-9X	2	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{3}{8}$							
Screws	R11F-9XX	2	$\frac{5}{8}$	$\frac{3}{8}$	$\frac{1}{4}$	$\frac{3}{8}$							
	R13XX-9	2	$\frac{5}{8}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{3}{8}$							
	RC13XXX-9	2	$\frac{5}{8}$	1	$\frac{1}{8}$	$\frac{3}{8}$							

All genuine screws and bolts are stamped "BENDIX" and in the majority of cases an abbreviated part number also appears on the head, viz.: "7X" (R11-7X), "F7" (R11-F7), "109X" (R11-109X), "F7XX" (R11-F7XX), etc. Some screws, particularly the "XX" type of  $\frac{1}{8}$ " diameter and also the "XXX" type, have been stamped with the letter "C" indicating special material and heat treatment. All screws must be used with the corresponding type of spring. To avoid using the wrong screw always refer to the above dimensional table and measure the screw.

The Trade-Mark "BENDIX" is on Each Genuine Part

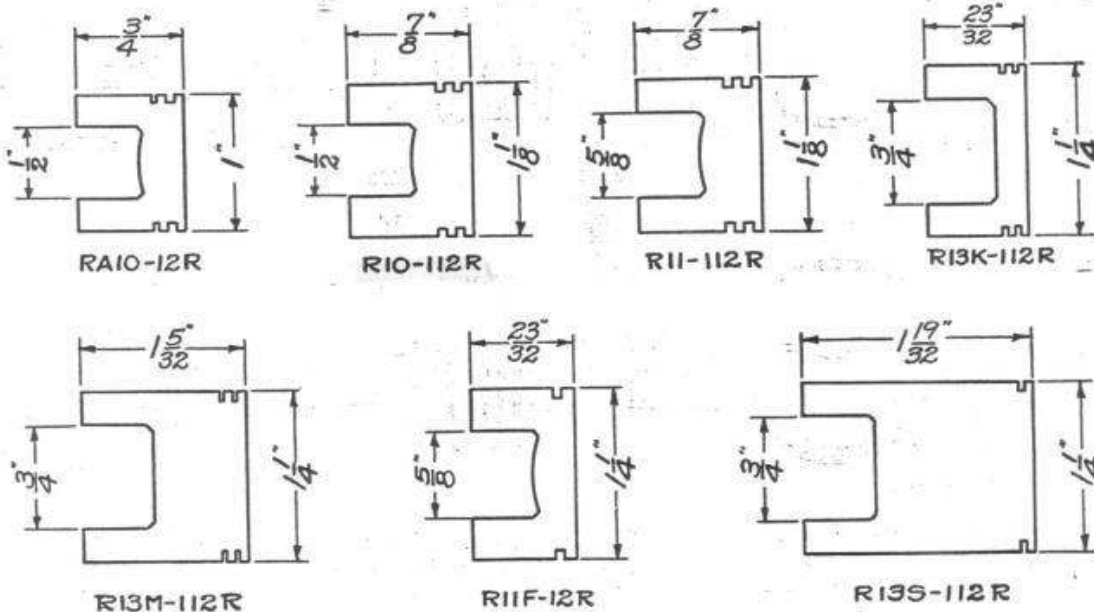
## Bendix Drive Heads



NOTE: R11F-5 as shown was originally known as F3050 and stamped "X" for recognition. It was first used on the A1569 drive, later, on the RC10-HD drive. The original R11F-5 was of similar design but of  $1\frac{1}{2}$ " overall length and did not have the stepped shoulder. In the future all drives using either "F" or "H" type springs (Regular and "X") will incorporate the new R11F-5 as factory assembly and stamping with the "X" discontinued. Service "F" type drives (FXX types excepted) with the original R11F-5 until the present supply is exhausted; however A1569 and RC10-HD drives must be serviced with the new R11F-5.

The Trade-Mark "BENDIX" is on Each Genuine Part

## Genuine Bendix Service Sleeves Makes Field Replacement Easy, Dependable and Economical



THESE SLEEVES ARE NOT INTERCHANGEABLE—DO NOT ATTEMPT IT.

The function of the slotted sleeve in conjunction with the lugs or extension of the driving head used on the Bendix Drive is to permit the free longitudinal movement of the gear and shaft portion, as described on Page 30, and too, at the same time, act as the filler under the driving spring to equalize the winding of the spring coils when the spring is subjected to an unusual load. A cracked or spread sleeve is usually due to the wrapping down of the drive spring after its elastic limit has been exceeded under overloads placed on the spring.

The original sleeve as assembled to the screw shaft at the factory is done by a crimping process, the exception to this being on those drives using

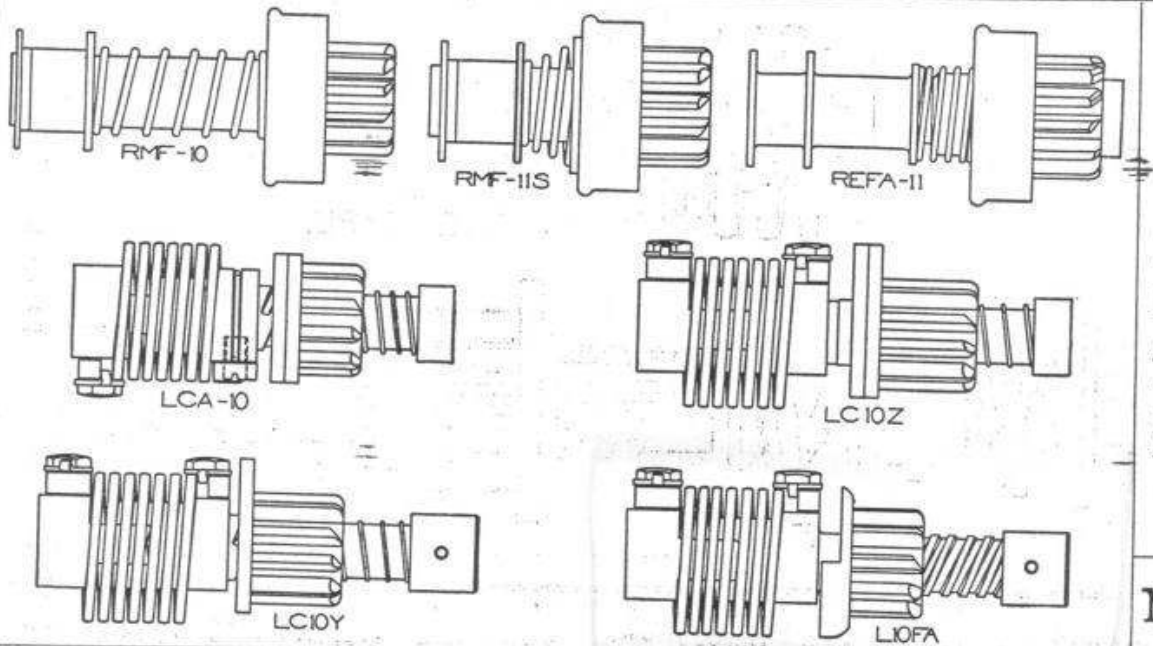
the R11F-12-R which can be used for both factory and service assembly. A similar assembly process is naturally impossible in the field and therefore the service sleeves shown above are designed for easy field replacement. In making a sleeve replacement be sure to obtain one stamped with the genuine trade mark "Bendix"—the use of other than a genuine part will surely result in improper functioning of the drive.

The sizes are determined by the width of the slot, approximately  $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ ". These fit the corresponding Bendix screw shafts, the diameter of the hole in the shaft being the same as the width of the slot of the sleeves. It is necessary that the correct size sleeve be used.

*The Trade-Mark "BENDIX" is on Each Genuine Part*



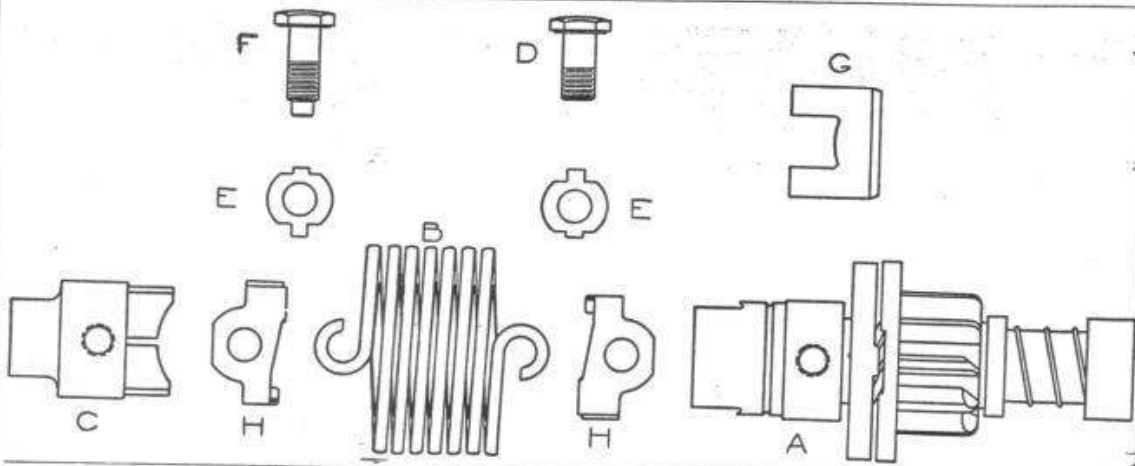
# Eclipse Manual Shifts and Other Special Types of Drives



P  
L  
A  
T  
E  
  
M

The group of Drives shown in Plate "M" were popular types used several years ago on various installations but have since been discontinued as original equipment, therefore none of these should be carried in stock but ordered from the factory only as actually required.

The Eclipse Manual Shifts also shown in Plate "M" are special types of Drives and on account of later structural changes it is strongly recommended that if any repairs become necessary the entire assembly be returned to us for rebuilding and testing, which will be done at a nominal charge. List prices of RMF and REF types, \$7.50.



P  
L  
A  
T  
E  
  
N

## LF10X Type Bendix Drive

Used only on Franklin from 1922 to 1929. These installations should be serviced with this type drive. The "F" preceding the numeral "10" in this particular designation stands for "Free Pinion". An examination will show you that the pinion is not threaded on the shaft but is driven by a threaded flanged nut

called the "Control Nut". This drive uses a special head (R10-105A) with an extended part for supporting the outboard end of the shaft and requires a special head spring screw (R10-109XF). For list price of complete drive and component parts, see plate "E".

The Trade-Mark "BENDIX" is on Each Genuine Part