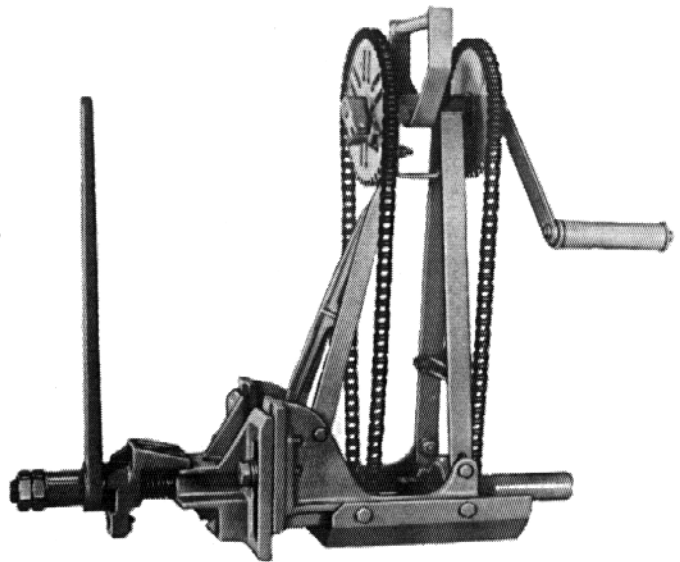


## Model HD-350 Bonding Drill

The Western-Cullen-Hayes Model HD-350 Bonding Drill is engineered to provide a safe, economical means for one man to accurately drill holes in either the head or web of the rail. Simple attachment and adjustment features permit efficient drilling of bond and channel pin holes in all types and weight of rail from 80 to 150 pounds, yet allow for instant removal of the drill when necessary.

Made of steel to withstand work abuse, the Model HD-350 Bonding Drill has established an enviable service record. It has won wide approval and acceptance as standard equipment by railroads throughout the world.



### HD-350 Bonding Drill Features

- Positive drilling feed with special gear reduction system
- Easily set depth gauge adjusting nuts control depth of hole
- Drill mounts/dismounts with one simple movement of lever
- Three tough jaw points take a firm bite in head of rail
- Adjustable to any height
- Clamp clears all standard angle bars
- Accommodates rail from 80 to 150 lbs.
- Ease in bonding through turnouts
- Ball valve oilers provided for bearings
- Frame is a rugged steel weldment
- Four models of chuck and spindle assemblies

### Ordering Information

All standard rail head and web bonds and duplex channel pins are designed to interface with 3/8" diameter holes.

Unless you have a need to drill holes of 9/32" diameter, we recommend that you purchase a Bonding Drill designed to accommodate 3/8" diameter drill bits. If you do have a need to drill both hole sizes, we recommend that you buy the Model HD-350A Drill (9/32" Hy-duty Chuck) and satisfy the need for 3/8" diameter holes with our special drill bits (PN: 1454, 1464).

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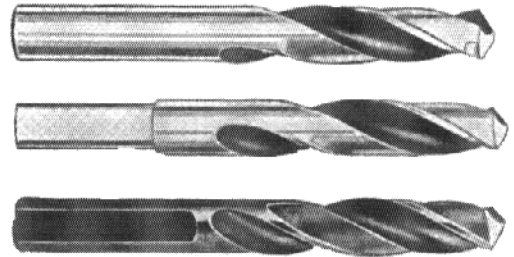
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(773) 254-9600 FAX (773) 254-1110

## Bonding Drills Ordering References

Ref. No.	Description	Part No.
A	Type HD-350 Bonding Drill with 9/32" Hyduty Chuck and Spindle (for flatted shank bits)	HD-350-A
B	Type HD-350 Bonding Drill with 3/8" Hyduty Chuck and Spindle (for flatted shank bits)	HD-350-B
D	Type HD-350 Bonding Drill with 3/8" Set Screw Spindle (for flatted shank bits)	HD-350-D
E	Type HD-350 Bonding Drill with 3/8" Collet Chuck and Spindle (for round shank bits)	HD-350-E

## Drill Bits

Western-Cullen-Hayes offers drill bits that provide long service life, accurate hole size and user satisfaction. Two sizes of bits are offered: 3/8" diameter for rail head, web bonds and duplex channel pins, and 9/32" diameter for single-lead channel pins. A special drill bit is available that has a 3/8" diameter point with 9/32" flatted shank (Ref. D, D1, below). Further, most bonding drill styles are available in extra-long life cobalt steel.



## Ordering References

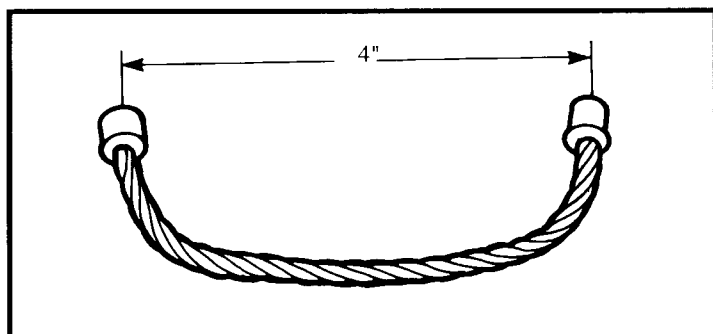
Ref. No.	Description	Part No.
A	High Speed Bonding Drill Bit, 9/32" dia. flatted shank	1452
B	High Speed Bonding Drill Bit, 3/8" dia. flatted shank	1455
B1	As above, but extra-long life cobalt steel	1460
C	High Speed Bonding Drill Bit, 3/8" dia. round shank	1455R
C1	As above, but extra-long life cobalt steel	1460R
D	High Speed Bonding Drill Bit, 3/8" dia. with 9/32" dia. flatted shank	1454
D1	As above, but extra-long life cobalt steel	1464

### WESTERN-CULLEN-HAYES, INC.

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**Track Bonds**  
**Track Circuit Connectors**  
**Accessories**

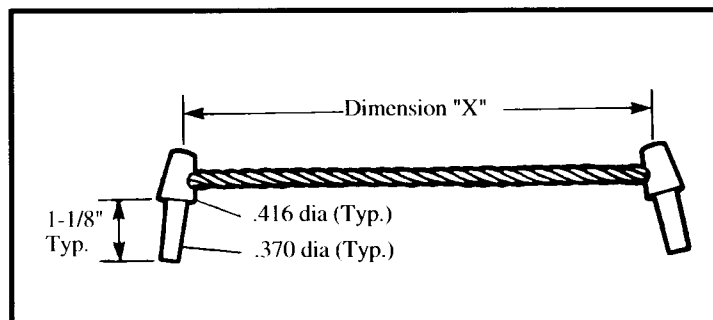
**Rail Head Bond**



Offset conductor 3/16" diameter. 3/8" terminals, 4" formed length. Conductor is composed of 7 strands of 19 wires each. Wires are .0125" cadmium bronze, hard drawn. Electro-plated overall after assembly.

**Ordering Reference: 334**

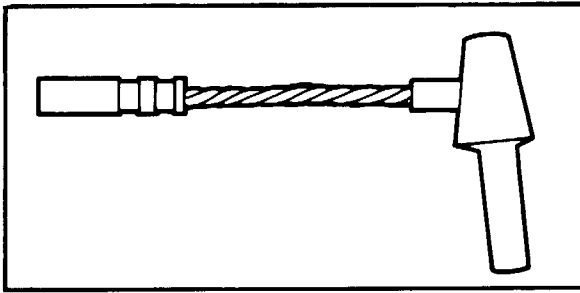
**Rail Web Bonds**



Total conductor .1875" diameter. Plug terminals as shown. Conductor is 133 cadmium bronze wires each .0125" diameter.

**Ordering Reference:** 334-1, Dimension "X" 46" long  
 334-2, Dimension "X" 36" long  
 334-3, Dimension "X" 32" long

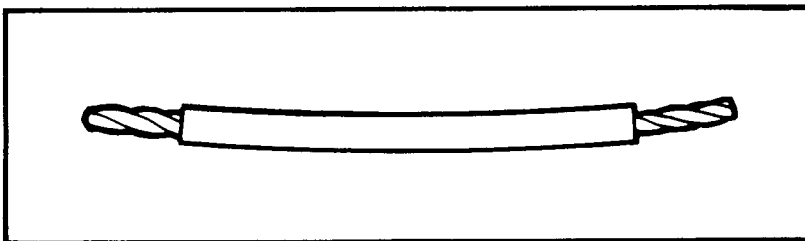
**Track Circuit Connector**



Conductor 3/16" diameter. Plug terminals same as on Rail Web Bonds. Sleeve accommodates 3/16" bond strand. Composition of conductor is same as Rail Head Bond.

**Ordering Reference: 335**

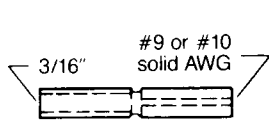
**Rail Bond Strand**



For bootleg-to-track circuit connector link. Conductor 3/16" diameter. Insulating jacket is 4/64" PVC.

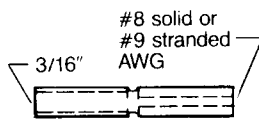
**Ordering Reference: 336 (specify length)**

**Sleeves**

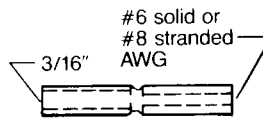


**Ref 1**

**Reducing Sleeves**



**Ref 2**

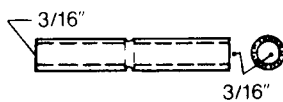


**Ref 3**

**Ordering References:**

Ref. No.	Part No.
1	337
2	337-1
3	337-2
4	337-3
5	337-4
6	337-5

**Splicing Sleeves**



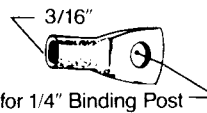
**Ref 4**

**Dead End Sleeves**



**Ref 5**

**Terminal Lug**



**Ref 6**

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