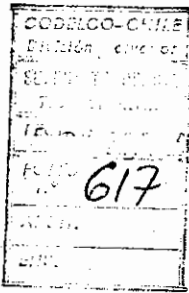


2L-87 March 2, 1987

Locomotive Pointers



Teller Diesel.

Technical Publications



SERVICE PARTS SEMINAR



PARTS ANNOUNCING

Electro-Motive's Service Parts Seminar will be held at the LaGrange facility on April 27th, 28th, & 29th for owner/operators of Electro-Motive locomotives.

EMD has made some major changes in the past few years, starting with the implementation of the strategic business units. Therefore, even if you have attended this seminar within the past 2-3 years we suggest that you join us again this year as we will discuss the most current information about EMD's products and services.

In addition to plant tours, listed below are some of the topics that will be covered during the 2-1/2 days:

- Materials Management
- MRP II
- Parts Engineering
- Customer Service
- Centralized Ordering
- Electronic Data Interchange
- Purchasing Policies
- Packaging And Kit Techniques
- Statistical Process Control
- Microprocessor Locomotive
- Warranty
- Rebuild
- Unit Exchange

The Seminar runs from 8:00 AM Monday, April 27th through approximately 2:00 PM Wednesday, April 29th.

Requests for enrollment or for additional information should be directed to:

The Training Center Supervisor
Electro-Motive Division
Department 702
La Grange, Illinois 60525
Telephone: 312-387-6672

JOURNAL BOX ODOR-TYPE HEAT INDICATOR 8141664

As of January 1987 the odor compound in 8141664 was changed to emit a distinct burning odor similar to burnt plastic.

Shelf life and the green non-permanent dye discharged to mark the adapter or housing and surrounding parts remains unchanged. The green dye is not hazardous to personnel and will not permanently stain clothing.

The previous use of a cherry smelling compound is being discontinued at the request of many customers. Also, the chemical was found to contain a small amount of environmentally hazardous material.

INCREASED LATERAL AT CENTER AXLE OF SD LOCOMOTIVES

Test results indicate that an increase in free lateral clearance at the center axle reduces the steady state curving forces at the lead axle between 10% and 30%. This reduction acts to improve the flange wear rates at the lead axle.

On trucks equipped with Hyatt journal bearings, the increased lateral can be accomplished by applying

two additional front cover shims per journal box on each side of the truck (center axle only). However, with the Timken journal bearing adapters there is no provision for field alteration of the free lateral clearance. Therefore, since September of 1986 all new SD locomotives have been equipped with HTC trucks that are modified permanently to provide the additional lateral at the center axle.

HTC trucks with the modified machining at the center axle can be identified by a raised bar or line underneath the HTC identification cast into the truck sideframe (HTC).

The modification involves machining an additional 1/8 inch off the inner pedestal sideface surfaces (center axle only). The overall width of the pedestal is maintained at nominally 7 inches, to retain

standard pedestal liners. The transverse pedestal spacing (Reference M.I. 1506, Page 11) at the center axle of these modified trucks is 79.75 inches, with the end axle spacings remaining at 79.50 inches.

Application of standard Hyatt journal boxes assembled with the basic 4 shim configuration, or standard Timken journal bearing adapters, will automatically result in the increased center axle lateral (5/8 inch) on trucks with modified machining (HTC). No other special journal bearing preparation will be necessary to achieve the increased lateral on modified trucks.

Journal boxes and adapters continue to be completely interchangeable from axle to axle and truck (HTC) to truck (HTC).

CENTRALIZATION OF CUSTOMER SERVICE

Just a reminder that we have completed the centralization of our customer service activities. All phone and mail orders will be processed through our Hodgkins parts center. Your shipments will continue to be handled through our outlying parts centers.

All parts orders should now be directed to:

Electro-Motive Division
P.O. Box 430
La Grange, IL 60525

Phone: 312-387-3902

Telecopier: 312-387-6626

or you may deal directly with your customer service rep on his/her direct dial number.

The customer service department hours will be 7:00 AM to 5:30 PM (Central Standard Time).

For all Repair & Return and Unit Exchange inquiries and orders see the chart below:

<u>PDC Location</u>	<u>Centralized Date</u>	<u>Rebuild Location</u>	<u>Rebuild Contact</u>	<u>Phone</u>
Atlanta	Sept. 1, 1986	Jacksonville	Vince Modica	904-765-1611
Commerce	Nov. 1, 1986	Commerce	Phil Arnone	213-724-6940
Ft. Worth	Dec. 1, 1986	La Grange	Rodger Peterson Ron Wrobel	312-387-6532 312-387-6744
Sacramento	Jan. 1, 1987	Commerce	Phil Arnone	213-724-6940
Bedford	Feb. 1, 1987	Halethorpe	Joan Snyder	301-242-4450

Please note that centralized ordering pertains to the order function only. Warehouse activity at each location has not been affected. No parts distribution centers have been closed.

D77/D87 TRACTION MOTOR ARMATURE BEARINGS

The EMD traction motor armature bearings were developed through many years of theoretical design, laboratory tests, and dedicated research. The bearings are characterized by their optimized surface finishes, geometry, tolerances, heat treatment and materials. These special features and materials are necessary to meet exacting design criteria for bearing life under all operating conditions experienced by EMD Locomotives.

The two EMD sources for traction motor armature bearings containing these special features are SKF (Svenska Kullagerfabriken) and HCI (Hyatt Clark Industries — formerly New Departure Hyatt).

Bearings other than those supplied by SKF and HCI do not incorporate all of the recommended special features, heat treatment, and materials.

Since January 1, 1985 D77 traction motor pinion-end armature bearing inner races have been made of CEVM steel (Consumable Electrode Vacuum Melted Steel). Sub-surface non-metallic inclusions are virtually eliminated by the consumable electrode process. For this reason the fatigue life of the inner race is substantially increased. The earlier change in November 1982 to CEVM steel for the D87 P.E. inner race clearly supports the life improvement.

The CEVM P.E. inner race is interchangeable with earlier races. The following table shows armature bearing part numbers for D77 and D87 traction motors.

TRACTION MOTOR ARMATURE BEARING ASSEMBLIES COMPLETE

	Current Part Numbers		Superseded Part Numbers	
	SKF	HCI	SKF	HCI
D77 P.E.	9440203	7455754	9437083	7451996
D87 P.E.	9440204	7455748	9436909	7455709
D77/D87 C.E.	9439610	7451863	9437296	8300117

TRACTION MOTOR ARMATURE BEARING COMPONENTS

D77 P.E.	Outer Race & Roller Assy.	9437084	7451997	9431539	7451875
	Inner Race	9440140	7455755	9431540	7451862
D87 P.E.	Outer Race & Roller Assy.	9436910	7455711	----	----
	Inner Race	9440205	7455749	9436911	7455710
D77-D87 C.E.	Outer Race & Roller Assy.	9437297	7451864	9428559	8106798
	Inner Race	9439611	7451318	9437315	8106797
	Collar	9434299	7451319	0457059	----

HEAD SEAT RING 9509180

Head seat ring 9509180, Fig. 1, and oversize head seat rings 9516094 (.018" oversize - .210" thick) and 9509803 (.038" oversize - .230" thick) have recently been modified to delete the coining at the 3 and 9 o'clock locations.

Since circumferential location is not necessary with the new ring, the locating notch at the 6 o'clock

location has also been removed. The "TOP" marking will remain, however, since it is necessary to install the head seat ring with the I.D. chamfer side up.

Removal of the coining is expected to reduce wear on the head seat ring. The coining was originally intended to relieve stress on the head flange at the crab clamping area, however, other manufacturing changes have made the coining process unnecessary.

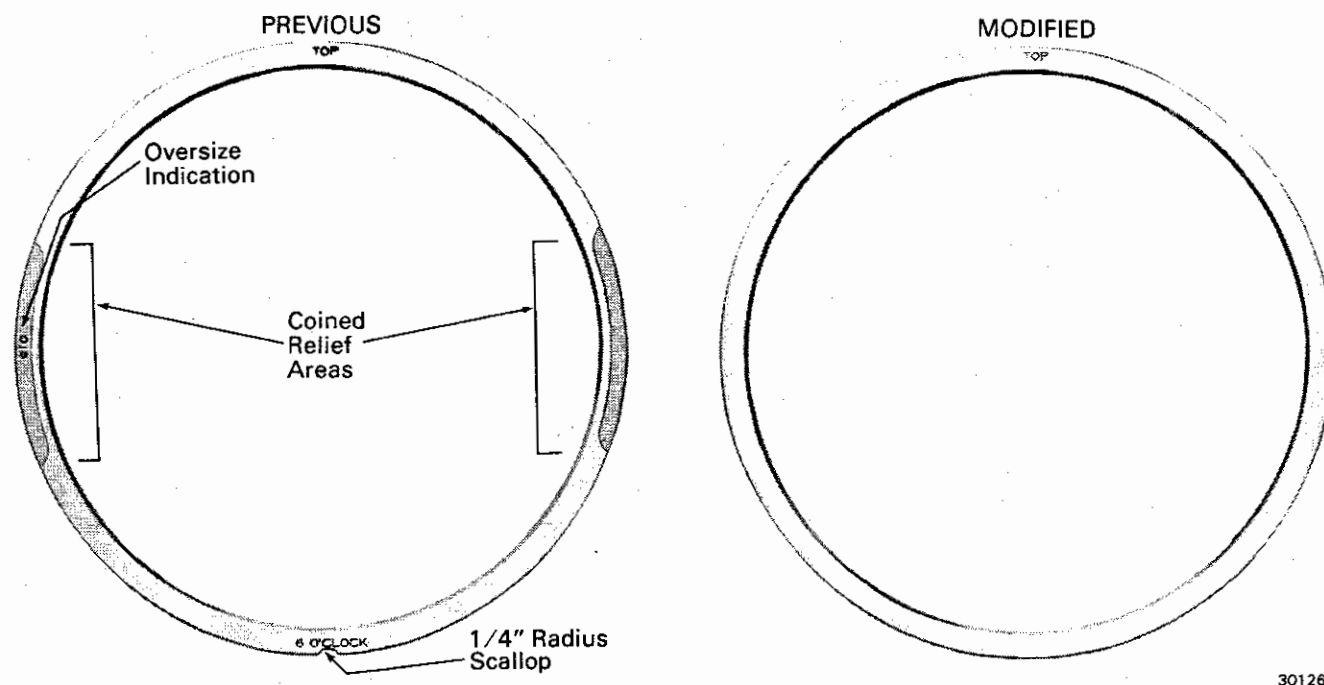


Fig. 1 - Head Seat Ring Comparison

ELIMINATION OF SPACERS FROM TURBOCHARGER EDUCTOR TUBE ASSEMBLY

The four spacer washers, Fig. 2, which were attached to the outer eductor tube flange of tube 9502409 have been eliminated. The spacers were originally applied to establish an air gap between the inner and outer eductor tubes. This gap allowed air circulation which in theory would retard carbon formation.

A review of customer experience as well as in-house investigations, indicates no difference in carbon formation rates. Inasmuch as the elimination of the spacers has no adverse effect on engine operation, eductor tubes are longer equipped with spacers.

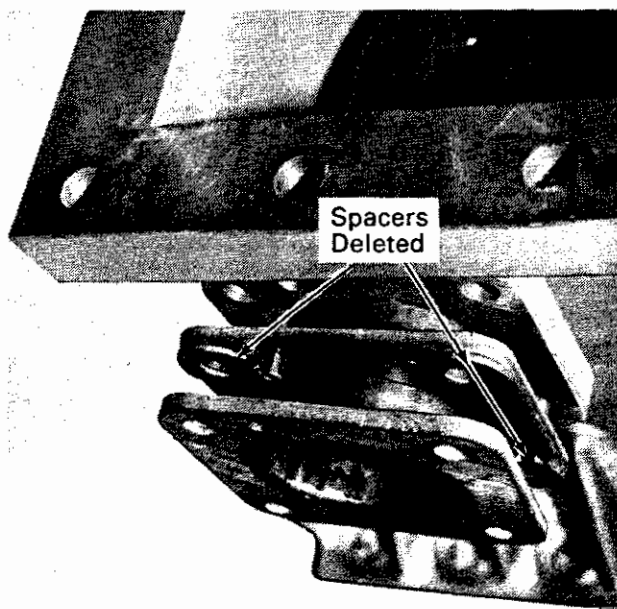


Fig. 2 - Spacers Deleted From Eductor Tube