



Customer Service Notice

Date: May 24, 2011

Units Affected: DM45/47/50 Digger Derricks (see attached list)

Boom Lift Cylinder Inspection

Altec has been informed of the possibility of a type of casting flaw occurring in the rod eye of boom cylinders of the above listed units. Flawed castings quickly develop cracks in the area of the flaw. An incomplete inspection of a batch of heat treated parts is the cause for the condition. **Death or serious injury can result from unexpected boom movement. Failure of the rod eye casting can cause unexpected boom movement.** Continued use of a cylinder with this type of casting flaw and cracking could result in eventual failure with the possibility of unexpected boom movement.

Units that do not exhibit this type of flaw or cracking in the first few months of service are not subject to an increased risk of cracking.

The cylinder supplier has asked for a visual inspection of all potentially affected parts, and, as a result, Altec requires that each lift cylinder rod eye on the above units be inspected for cracks within 30 days of receipt of this CSN. The inspection can be done by the customer or an Altec Service Technician using the following procedure. An overhead lift device or jack with a cradle for the cylinder will be needed for part of this inspection.

1. Position the unit on a level surface, apply the parking brake and chock the wheels. Engage the unit's hydraulic system. Properly set the outriggers. Disengage the unit's hydraulic system.
2. Look at the boom lift cylinder rod eye attached to the boom. A supplier code is cast in the rod eye (refer to Figure 1). The code is four letters. If the supplier code is **FKXU** or **FKMG**, the boom lift cylinder will need to be unpinned and lowered for further inspection. Go to Step 3. If the supplier code does not match either of those listed here, the inspection is complete. Go to Step 9.

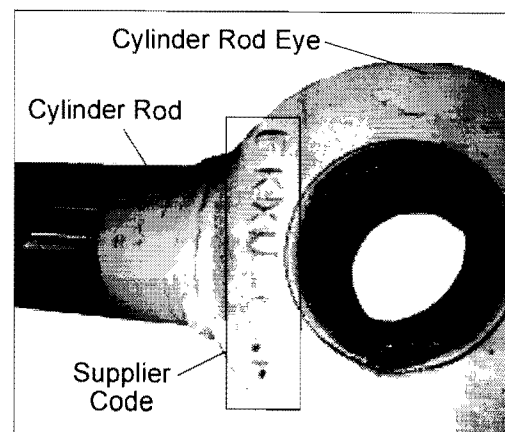


Figure 1 — Supplier Code Location

3. Support the cylinder by attaching a nylon strap to the cylinder and connecting the strap to an overhead hoist. A jack can also be used from below to cradle the cylinder barrel.
4. Remove the retaining rings and the forged pin retainer holding the lift cylinder mounting pin to the boom. Remove the pin. Lower the rod end of the cylinder down below the base boom weldment to make the rod end accessible for cleaning and further visual inspection.
5. Clean off all grease and dirt from the rod end casting using solvent and/or degreaser.
6. Look at the flat area on both sides of the cylinder rod end on the area just above the rod end. Also look at the rounded area of the rod end where the pin bearing is located. Flaws/cracks can occur on any part of the rod eye casting. Use a bright light (trouble light or flashlight) to help identify any flaws/cracks. Flaws/cracks will appear as longitudinal hairline surface imperfections (refer to Figure 2). The surface of the rod eye casting will have small dimples and other rough areas from the casting process. Those normal surface imperfections should not be confused with an actual crack that will appear more as a line.

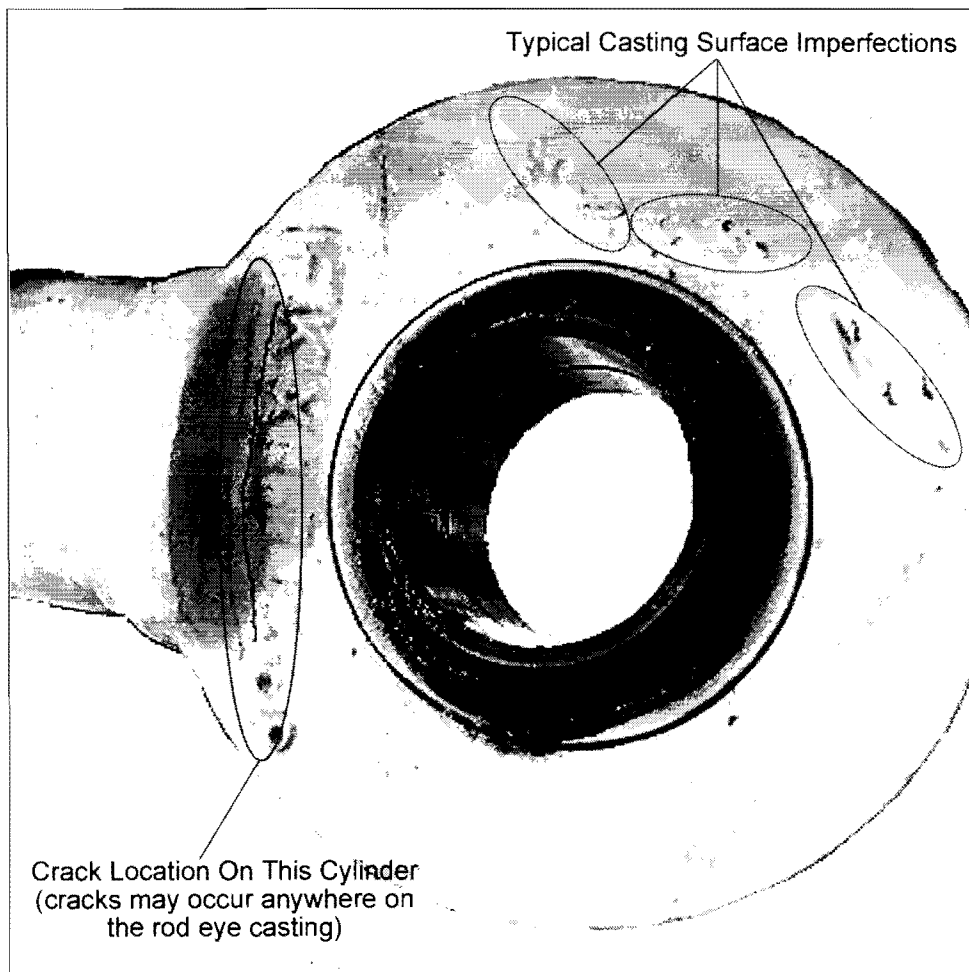


Figure 2 — Cracks And Surface Imperfections

7. If the visual inspection reveals cracks, contact Altec Technical Support (1-877-GO ALTEC (1-877-462-5832, prompt 4) for guidance on further action, and remove the unit from service until the required action is completed.

8. If no cracks are found, reinstall the cylinder by aligning the pin hole in the rod with the boom bosses. Coat the pin with antiseize compound and install in the pin hole. Reinstall the retaining rings with the sharp edge out. Install the pin retainer and torque the retainer bolt to 90 ft-lb. Engage the unit's hydraulic system and operate the boom looking for any problems and proper operation. Make any corrections needed.
9. Stow the boom. Retract the outriggers. Disengage the unit's hydraulic system and return the unit to service.
10. For all units, complete the inspection form at the end of the CSN and fax it to Altec.

Inspection, and if needed installation, of the cylinder can be done by the customer. The parts for this repair are covered under the Altec Warranty Policy. Additionally, Altec will reimburse up to \$100 for an inspection and up to \$250 for the labor to replace the cylinder. A warranty claim must be submitted for reimbursement for the cost of the parts and labor. Customers are responsible for the travel costs of an Altec Mobile Service technician if the technician performs the inspection or repair at the owner's location.

Altec Use Only	
Labor Allowance	1.0 hr. Inspection 2.5 hr. Cylinder Replacement
Account #	010.0392.43151.846.0000.000
Parts	Warranty Allowed
Prime Fail P/N	35040262
Doc Ref	None

CSN 545 Affected Units

Affected units shown by Model and Serial Number

Model	Serial Number	Model	Serial Number	Model	Serial Number
DM47 BC	0110DV4372	DM45 TR	0310DV4457	DM47 BR	0410DV4510
DM47 TR	0110DV4376	DM45 TR	0310DV4458	DM47 BR	0410DV4512
DM47 BC	0110DV4393	DM47 TR	0310DV4459	DM47 TR	0410DV4513
DM45 TR	0110DV4395	DM47 BR	0310DV4460	DM47 TR	0410DV4514
DM45 TR	0110DV4396	DM45 TR	0310DV4461	DM47 BR	0410DV4515
DM47 BR	0110DV4397	DM47 TR	0310DV4462	DM47 BR	0410DV4516
DM47 TR	0210DV4398	DM47 TR	0310DV4463	DM47 BR	0410DV4517
DM47 TR	0210DV4399	DM47 TR	0310DV4464	DM47 TR	0410DV4518
DM47 TR	0210DV4400	DM47 TR	0310DV4465	DM47 TR	0410DV4519
DM47 TR	0210DV4401	DM47 TR	0310DV4467	DM47 TR	0410DV4520
DM47 BR	0210DV4402	DM47 TR	0310DV4468	DM47 TR	0410DV4521
DM47 TR	0210DV4403	DM47 TR	0310DV4469	DM47 BR	0410DV4522
DM47 TR	0210DV4405	DM47 TR	0310DV4470	DM47 TR	0410DV4523
DM47 TR	0210DV4410	DM47 BR	0310DV4471	DM47 BR	0410DV4524
DM47 TR	0210DV4411	DM47 BR	0310DV4472	DM47 BR	0410DV4525
DM47 TR	0210DV4412	DM47 BR	0310DV4473	DM47 BR	0410DV4526
DM47 BR	0210DV4413	DM47 TR	0310DV4474	DM47 BR	0410DV4527
DM47 BC	0210DV4414	DM47 TR	0310DV4475	DM45 TC	0510DV4528
DM47 BR	0210DV4416	DM47 TR	0310DV4476	DM45 TC	0510DV4529
DM47 BR	0210DV4417	DM47 TR	0310DV4477	DM47 TR	0510DV4530
DM47 BR	0210DV4418	DM47 TR	0410DV4478	DM45 TR	0510DV4531
DM47 TR	0210DV4419	DM47 BR	0410DV4479	DM47 TR	0510DV4533
DM45 BC	0210DV4420	DM45 BR	0410DV4481	DM47 BR	0510DV4534
DM47 BC	0210DV4421	DM47 BR	0410DV4482	DM47 BR	0510DV4535
DM45 BB	0210DV4422	DM47 BR	0410DV4483	DM47 BR	0510DV4536
DM47 TB	0210DV4423	DM47 TR	0410DV4484	DM47 BR	0510DV4537
DM47 BR	0210DV4424	DM47 TR	0410DV4486	DM47 BR	0510DV4538
DM47 BR	0210DV4425	DM45 BR	0410DV4480	DM47 BR	0510DV4539
DM47 BR	0210DV4426	DM47 BR	0410DV4485	DM47 BR	0510DV4541
DM47 TR	0210DV4427	DM45 TR	0410DV4487	DM50 BR	0510DV4542
DM47 BR	0210DV4428	DM45 TR	0410DV4488	DM47 BR	0510DV4543
DM47 TR	0210DV4430	DM45 TR	0410DV4489	DM47 BR	0510DV4544
DM47 TR	0210DV4431	DM47 BR	0410DV4490	DM47 TR	0510DV4545
DM45 TR	0210DV4432	DM47 TR	0410DV4491	DM47 BR	0510DV4546
DM45 TR	0210DV4433	DM45 TR	0410DV4492	DM47 BR	0510DV4547
DM47 TR	0210DV4434	DM45 TR	0410DV4493	DM47 TR	0510DV4548
DM47 TR	0210DV4435	DM45 TR	0410DV4494	DM47 TR	0510DV4549
DM47 BR	0210DV4436	DM47 TR	0410DV4495	DM47 TR	0510DV4550
DM45 TR	0210DV4437	DM47 TR	0410DV4496	DM47 BR	0510DV4551
DM47 TR	0210DV4440	DM47 TR	0410DV4497	DM47 TR	0510DV4552
DM47 TR	0210DV4441	DM45 TC	0410DV4498	DM47 BR	0510DV4553
DM47 BR	0310DV4442	DM45 TR	0410DV4499	DM47 BR	0510DV4554
DM45 BR	0310DV4443	DM45 TC	0410DV4500	DM47 BR	0510DV4555
DM45 BR	0310DV4445	DM47 BR	0410DV4501	DM47 BR	0510DV4556
DM47 TR	0310DV4446	DM47 BR	0410DV4502	DM47 BR	0510DV4557
DM47 TR	0310DV4447	DM47 TR	0410DV4503	DM47 BR	0510DV4558
DM47 TR	0310DV4448	DM47 TR	0410DV4504	DM47 BR	0510DV4559
DM45 TR	0310DV4453	DM47 BR	0410DV4506	DM45 TC	0510DV4560
DM47 BR	0310DV4454	DM47 BR	0410DV4507	DM47 TR	0510DV4562
DM45 TR	0310DV4455	DM47 BR	0410DV4508	DM47 TR	0510DV4563
DM47 TR	0310DV4456	DM47 BR	0410DV4509	DM47 TR	0510DV4564

Model	Serial Number
DM47 TR	0510DV4565
DM47 BR	0510DV4566
DM47 BR	0510DV4567
DM47 BR	0510DV4568
DM47 BR	0510DV4569
DM47 BR	0510DV4570
DM47 BR	0510DV4571
DM47 BR	0510DV4572
DM47 BR	0510DV4573
DM47 BR	0510DV4574
DM47 TR	0510DV4575
DM47 TR	0510DV4576
DM47 BR	0510DV4577
DM47 BR	0510DV4578
DM47 BR	0510DV4580
DM47 BR	0510DV4581
DM47 TR	0510DV4582
DM45 TC	0510DV4584
DM47 TR	0510DV4585
DM47 TR	0510DV4586
DM45 TC	0510DV4587
DM47 TR	0510DV4588
DM47 TR	0510DV4589
DM47 TR	0510DV4590
DM47 TR	0510DV4591

Model	Serial Number
DM47 TR	0510DV4592
DM47 TR	0510DV4593
DM45 TR	0610DV4597
DM45 TR	0610DV4598
DM45 TR	0610DV4599
DM47 TR	0610DV4601
DM47 TR	0610DV4603
DM47 TR	0610DV4608
DM47 TB	0610DV4610
DM47 BC	1010DV4813
DM45 TR	0610DV4614
DM45 TR	0610DV4615
DM47 TR	0610DV4616
DM45 TC	0710DV4618
DM47 TR	0710DV4619
DM47 TR	0710DV4621
DM47 TR	0710DV4622
DM45 TR	0710DV4623
DM47 TR	0710DV4624
DM47 TR	0710DV4626
DM47 TR	0710DV4629
DM45 BR	0710DV4639
DM47 TR	0710DV4646
DM47 TR	0710DV4648
DM47 TR	0710DV4649

Model	Serial Number
DM47 TR	0710DV4656
DM47 TR	0710DV4657
DM47 TR	0710DV4660
DM47 TR	0710DV4663
DM47 BR	0810DV4674
DM47 BR	0810DV4676
DM47 BR	0810DV4677
DM45 TR	0810DV4681
DM47 TR	0810DV4685
DM47 TR	0810DV4686
DM47 TR	0810DV4687
DM47 TR	0810DV4689
DM47 TR	0810DV4690
DM47 TR	0810DV4693
DM47 TR	0810DV4717
DM47 TR	0810DV4718
DM47 TR	0810DV4725
DM47 BR	0910DV4740
DM47 TR	0910DV4743
DM47 BC	0910DV4747
DM47 TR	0910DV4771
DM47 TR	0910DV4772
DM47 TR	0910DV4776
DM47 BR	1110DV4838

CSN 545 - Boom Lift Cylinder Inspection Sheet

Complete this form and FAX to: 1-877-659-9929

Model	Serial Number	Supplier Code	Crack Found		Brief Description Of Crack Location	Date Inspected
			Yes	No		

Make additional copies of this form, as needed, for additional units. Contact Technical Support at 1-877-GO ALTEC (1-877-462-5832), prompt 4, for further repair information.

Company Name: _____ Phone _____

Service Company Name: _____ Phone _____

Company Contact: _____

Company Street Address: _____

State: _____ ZIP Code: _____

Signature: _____