[4910-13-U]

## DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [62 FR 3204 NO. 14 01/22/97]

[Docket No. 95-NM-227-AD; Amendment 39-9888; AD 97-02-04]

RIN 2120-AA64

Airworthiness Directives; Airbus Model A300, A300-600, A310, and A320 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to certain Airbus Model A300, A300-600, A310, and A320 series airplanes, that currently requires an inspection of the landing gear brakes for wear, and replacement if the specified wear limits are not met. That AD also requires incorporation of the specified wear limits into the FAA-approved maintenance inspection program. This amendment requires that certain wear limits that are dependent on brake stack weight be used in conjunction with specified brake stack weights, and that maximum allowable brake wear limits for additional brake units be incorporated into the FAA-approved maintenance program. This amendment is prompted by a report that some brakes that are subject to the requirements of the existing AD have not been removed from service and by the determination of the maximum allowable brake wear limits for additional brake unit part numbers. The actions specified by this AD are intended to prevent the loss of brake effectiveness during a high energy rejected takeoff.

EFFECTIVE DATE: February 26, 1997.

ADDRESSES: The service information that pertains to this rulemaking action may be obtained from Messier Services, 45635 Willow Pond Plaza, Sterling, Virginia 20164; Allied Signal Aerospace, Technical Publications, Dept. 65-70, P.O. Box 52170, Phoenix, Arizona 85072-2170; or BFGoodrich Company, Aircraft Evacuation Systems, Department 7916, Phoenix, Arizona 85040. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Joe Jacobsen, Aerospace Engineer, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (206) 227-2011; fax (206) 227-1149.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) by superseding AD 94-26-05, amendment 39-9101 (59 FR 65927, December 22, 1994), which is applicable to certain Airbus Model A300, A300-600, A310, and A320 series airplanes, was published in the **Federal Register** on June 13, 1996 (61 FR 29996). The action proposed to continue to require inspection of certain landing gear brakes for wear, replacement of the brakes if certain wear limits are not met, and incorporation of the specified wear limits into the FAA-approved maintenance inspection program. Additionally, the action proposed to:

1. revise certain brake part numbers and maximum brake wear information specified in the existing AD;

2. require that certain wear limits that are dependent on brake stack weight be used in conjunction with appropriate brake stack weights specified in various service documents; and

3. require that maximum allowable brake wear limits for additional brake units be incorporated into the FAA-approved maintenance program.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

## Support for the Proposal

Several commenters support the proposed rule.

#### **Request for Clarification of Information in TABLE 3**

One commenter states that certain information in TABLE 3 of the proposal needs clarification to add the following information:

1. Messier-Bugatti C20060-100 series brakes can also be installed on Airbus Model A300B4-200 series airplanes; however, TABLE 3 indicates only the Model A300-600 as having these brakes installed.

2. Messier Bugatti C20175100 series brakes should be included as brakes that can be installed on Model A300-600 series airplanes.

3. Messier-Bugatti C20210500 series brakes should be included as brakes that can be installed on Model A300 B4-600R series airplanes.

The commenter points out that these brake models (and their applicable brake wear limits) are included in the referenced manufacturer's Component Maintenance Manual (CMM), but TABLE 3 did not make it clear which airplane models are equipped with them.

The FAA concurs with the commenter's observations and has made the appropriate revisions to both TABLE 3 and TABLE 4 accordingly.

### **Request to Increase Wear Pin Length for Modified Brakes**

One commenter requests that the proposal be revised to increase the allowable wear pin length for Messier Bugatti C20210200 series brakes from 1.97 inches to 2.559 inches by installation of a shim at the thrust plate. The commenter states that this provision is contained in Messier Service Bulletin 470-32-675, Revision 1, dated September 26, 1994 (which is cited in TABLE 4 under the brake wear limit references for Model A300 B4-600R series airplanes).

The FAA does not concur. The FAA contacted the manufacturer, who clarified this provision: When the shim is added, the total wear of the heat pack is increased. However, the wear pin limit of 1.97 inches does not change. In light of this, the FAA finds that the wear limit of 1.97 inches, as indicated in the notice, is correct.

## Request for Addition of Wear Limits for Brakes with Carbon /D3/ Heat Packs

One commenter requests that the proposal be revised to specify what the wear limits are for brakes equipped with the latest version of Messier carbon /D3/ heat packs.

The FAA does not concur that a revision is necessary. The manufacturer has advised the FAA that, contrary to what was previously assumed, some /D3/ heat packs are still in service. However, the manufacturer confirmed that the allowable wear limits specified in the notice are independent of whether or not a /D3/ heat pack is used. The wear limits, as stated in the notice, are correct.

#### **Request to Clarify Requirement to Incorporate TABLE 3 Information**

One commenter expresses confusion concerning the requirements of proposed paragraph (b)(1), which appears to indicate that the entirety of TABLE 3 must be incorporated into the FAA-approved maintenance program, regardless of the type of airplane an operator may operate or the type of brakes used. The commenter requests that this be clarified.

The FAA concurs that clarification may be necessary. In presenting the information in the form of a table, the FAA assumed that operators would incorporate into their programs only the specific information pertaining to the airplanes that they actually operate, rather than all of the information contained in TABLE 3. The table format was selected as a more convenient method of displaying this information, rather than designating individual paragraphs applicable to each individual airplane model and/or brake models. Regardless of the format in which this information is introduced, operators are required to comply only with those items that directly affect the equipment that they operate. The FAA has revised the wording of paragraph (b)(1) of the final rule to make this more precise.

### **Request to Clarify Provisions Regarding Brake Stack Weights**

One commenter requests that proposed paragraph (b)(3) be clarified with regard to its specific requirements. That paragraph states first that the brake wear is to be measured in accordance with certain documents; it then states that listed brake wear limits that are identified in referenced service documents as being dependent on brake stack weights "shall be used in conjunction with the brake stack weights specified in that service information." The commenter considers this to be "impossible to understand."

The FAA concurs that clarification may be appropriate. The purpose of paragraph (b)(3) is to direct operators to service information that provides specific procedures for measuring the brake wear of each type of brake addressed in this AD. As indicated in that paragraph, these procedural instructions are contained in the following sources:

- 1. Chapter 32-42-27 of the Airplane Maintenance Manual;
- 2. Chapter 32-32-() of the brake manufacturer's Component Maintenance Manual; and/or

3. service bulletins listed in TABLE 4 of this AD.

The second sentence of paragraph (b)(3) addresses particular brakes that, because of their lower (brake stack) weight, have proven to be unable to withstand maximum rejected takeoff (RTO) energy when they are fully worn to the limit that is specified in the previously issued AD. If any of the service bulletins listed in TABLE 4 indicates that the brake wear limit for a specific brake is dependent on the brake stack weight of that brake, then the operator must verify that the brake wear limit specified in TABLE 3 is being used with the correct brake stack weight. The FAA points to an incident that occurred previously in which the brake wear limit specified in the previously issued AD was used with an incorrect brake stack weight. This situation presented an unsafe condition because the brake wear limit being used was beyond what the particular brake actually should have been limited to in order to maintain braking effectiveness during a high energy RTO. The wording of paragraph (b)(3) is an attempt to prevent that error from occurring again.

The FAA has revised the wording of paragraph (b)(3) in this final rule to clarify the intent of that paragraph.

#### Conclusion

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

#### **Cost Impact**

There are approximately 165 Model A300, A300-600, A310, and A320 series airplanes of U.S. registry that will be affected by this proposed AD.

Incorporation of the revision of the FAA-approved maintenance inspection program, which is currently required by AD 94-26-05, takes approximately 20 work hours per operator (for 4 U.S. operators) to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact on U.S. operators to accomplish this currently required action is estimated to be \$4,800, or \$1,200 per operator.

The inspection currently required by AD 94-26-05 takes approximately 15 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. The cost of required parts to accomplish the change in wear limits for these airplanes (that is, the cost resulting from the requirement to change the brakes before they are worn to their previously approved limits for a one-time change) will be approximately \$2,236 per airplane. The FAA estimates that 46 of the 165 affected airplanes of U.S. registry will be required to accomplish the inspection. Based on these figures, the cost impact on U.S. operators to accomplish the currently required inspection is estimated to be \$144,256, or \$3,136 per airplane.

The new actions that are required in this AD action will affect 1 U.S. operator of 8 airplanes. The FAA estimates that the new actions will take approximately 15 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts will cost approximately \$2,236 per airplane. Based on these figures, the cost impact on the affected U.S. operator of the requirements of this AD is estimated to be \$3,136 per airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

#### **Regulatory Impact**

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

### Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 - [Amended]

2. Section 39.13 is amended by removing amendment 39-9101 (59 FR 65927, December 22, 1994), and by adding a new airworthiness directive (AD), amendment 39-9888, to read as follows:

**97-02-04 AIRBUS INDUSTRIE**: Amendment 39-9888. Docket 95-NM-227-AD. Supersedes AD 94-26-05, Amendment 39-9101.

Applicability: Model A300, A300-600, A310, and A320 series airplanes equipped with Messier-Bugatti, BFGoodrich, Allied Signal (ALS) Aerospace Company (Bendix), or Aircraft Braking Systems (ABS) brakes; certificated in any category.

**NOTE 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent the loss of brake effectiveness during a high energy rejected takeoff (RTO), accomplish the following:

## **RESTATEMENT OF REQUIREMENTS OF AD 94-26-05:**

(a) Within 180 days after January 23, 1995 (the effective date of AD 94-26-05, amendment 39-9101), accomplish paragraphs (a)(1) and (a)(2) of this AD.

(1) Inspect main landing gear brakes having the brake part numbers listed in TABLE 1, below, for wear. Any brake worn more than the maximum wear limit specified in TABLE 1, below, must be replaced, prior to further flight, with a brake within that limit.

Airplane Model/ Series	Brake Manufacturer	Brake Part No.	Maximum Brake Wear Limit (inch/mm)
A300 B2-100	Messier-Bugatti	286349-115	0.98" (25.0 mm)
A300 B2-100	Messier-Bugatti	286349-116	0.98" (25.0 mm)
A300 B2-100	BFGoodrich	2-1449	1.4" (35.6 mm)
A300 B2-100	BFGoodrich	2-1449	1.1" (27.9 mm) S.C.*
A300 B4-100	Messier-Bugatti	A21329-41-7	1.1" (28.0 mm)
A300 B4-100	Messier-Bugatti	A21329-41-17	1.1" (28.0 mm)
A300 B4-100	ALS (Bendix)	2606802-3/-4/-5	0.9" (22.9 mm)
A300 B4-100	ALS (Bendix)	2606802-3/-4/-5	1.48" (37.6 mm) S.C.*
A300 B4-100	BFGoodrich	2-1449	1.4" (35.6 mm)
A300 B4-100	BFGoodrich	2-1449	1.1" (27.9 mm) S.C.*
A300 B4-200	Messier-Bugatti	C20060-100	1.1" (28.0 mm)

Airbus Industrie Model A300, A300-600, A310, and A320 Series Airplanes Equipped with Messier-Bugatti, BFGoodrich, Allied Signal (ALS) Aerospace Company (Bendix), or Aircraft Braking Systems (ABS) Brakes

A300-600	Messier-Bugatti	C20060-100	1.1" (28.0 mm)
A300-600	ALS (Bendix)	2607932-1	0.9" (22.9 mm)
A300-600	ALS (Bendix)	2607932-1	1.48" (37.6 mm) S.C.*
A300 B4-600R	Messier-Bugatti	C20210000	1.97" (50.0 mm)
A300 B4-600R	Messier-Bugatti	C20210200	1.97" (50.0 mm)
A310-200	Messier-Bugatti	C20089000	1.1" (28.0 mm)
A310-200	ALS (Bendix)	2606822-1	1.26" (32.0 mm)
A310-200	ALS (Bendix)	2606822-1	1.5" (38.2 mm) S.C.*
A310-300	Messier-Bugatti	C20194000	1.97" (50.0 mm)
A310-300	Messier-Bugatti	C20194200	1.97" (50.0 mm)
A310-300	ABS	5010995	1.97" (50.0 mm)
A320	Messier-Bugatti	C20225000	1.97" (50.0 mm)
A320	Messier-Bugatti	C20225200	1.97" (50.0 mm)
A320	BFGoodrich	2-1526-2	1.97" (50.0 mm)
A320	BFGoodrich	2-1526-3/-4	2.68" (68.0 mm)

\* S.C. represents "Service Configured" brakes, which are marked according to the instructions provided in the brake manufacturer's Component Maintenance Manual (CMM).

**NOTE 2:** Measuring instructions that must be revised to accommodate the new brake wear limits specified in TABLE 1, above, can be found in Chapter 32-42-27 of the Airplane Maintenance Manual (AMM), in Chapter 32-32-() or 32-44-() of the brake manufacturer's CMM, or in certain service bulletins (SB), as listed in TABLE 2, below:

Brake Manufacturer	Part No.	Document/ Chapter	Date/Revision (or later revisions)	
FOR MODEL A300	) B2-100 SERIES A	IRPLANES:		
Messier-Bugatti	286349-115	CMM 32-42-27	April 1991	
Messier-Bugatti	286349-116	CMM 32-42-27	April 1991	
BFGoodrich	2-1449 and S.C.*	CMM 32-44-37 SB 567 (2-1449-32-4)	January 1993 January 30, 1993	
FOR MODEL A300	0 B4-100 SERIES A	IRPLANES:		
ALS (Bendix)	2606802-3	CMM 32-42-02	September 1993	
	2606802-4	SB 2606802-	March 31, 1993	

32-003

2606802-5

and S.C.\*

TABLE 2
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BFGoodrich	2-1449	CMM 32-44-37	January 1993
	and S.C.*	SB 567	January 30, 1993
		(2-1449-32-4)	-

#### FOR MODEL A300 B4-200 AND A300-600 SERIES AIRPLANES:

ALS (Bendix)	2607932-1	CMM 32-42-27	September 1993
	and S.C.*	SB 2607932-32-	March 31,1993,
		002	and Revision 1/
			October 1, 1993

#### FOR MODEL A300 B4-600R SERIES AIRPLANES:

Messier-Bugatti C20210000 Airbus SB April 6, 1990 and C20210200 470-32-675	
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## FOR MODEL A310-200 SERIES AIRPLANES:

ALS (Bendix) 2606822-1 C and S.C.* S	CMM 32-42-03 5B 2606822-32- 002	September 1993 March 31, 1993
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### FOR MODEL A310-300 SERIES AIRPLANES:

Messier-Bugatti	C20225000 and C20225200	Airbus SB 470-32-675	April 6, 1990

\* S.C. represents "Service Configured" brakes, which are marked according to the instructions provided in the brake manufacturer's CMM.

(2) Incorporate into the FAA-approved maintenance inspection program the maximum brake wear limits specified in paragraph (a)(1) of this AD.

**NOTE 3:** Once an operator has complied with the requirements of paragraphs (a)(1) and (a)(2) of this AD, those paragraphs do not require that operators subsequently record accomplishment of those requirements each time a brake is inspected or overhauled in accordance with that operator's FAA-approved maintenance inspection program.

### **NEW REQUIREMENTS OF THIS AD:**

(b) Within 90 days after the effective date of this AD, revise the FAA-approved maintenance program to include the requirements of paragraphs (b)(1), (b)(2), (b)(3), and (b)(4) of this AD. Accomplishment of these requirements terminates the requirements of paragraph (a) of this AD.

(1) Incorporate into the FAA-approved maintenance program the maximum brake wear limits specified in paragraph TABLE 3 of this AD for the applicable airplane model.

(2) Comply with those measurements thereafter.

(3) Measure the brake wear in accordance with Chapter 32-42-27 of the AMM; or Chapter 32-32-() of the brake manufacturer's CMM; or the service bulletins (SB) listed in TABLE 4, below. Note that the brake wear limits specified in TABLE 3 may be dependent on brake stack weight. In those cases, refer to the service information specified in TABLE 4 to verify that the correct brake stack weight is being used.

(4) If any brake has measured wear beyond the maximum wear limits specified in TABLE 3 of this AD, prior to further flight, replace it with a brake that is within the wear limits specified in TABLE 3.

Airplane Model/ Series	Brake Manufacturer	Brake Part No.	Maximum Brake Wear Limit (inch/mm)
A300 B2-100	Messier-Bugatti	286349-115	0.98" (25.0 mm)
A300 B2-100	Messier-Bugatti	286349-116	0.98" (25.0 mm)
A300 B2-100	BFGoodrich	2-1449	1.4" (35.6 mm)
A300 B2-100	BFGoodrich	2-1449	1.1" (27.9 mm) S.C.*
A300 B4-100	Messier-Bugatti	A21329-41-7	1.1" (28.0 mm)
A300 B4-100	Messier-Bugatti	A21329-41-17	1.1" (28.0 mm)
A300 B4-100/-200	ALS (Bendix)	2606802-3/-4/-5	0.9" (22.9 mm)
A300 B4-100/-200	ALS (Bendix)	2606802-3/-4/-5	1.48" (37.6 mm) S.C.*
A300-B4-100	BFGoodrich	2-1449	1.4" (35.6 mm)
A300-B4-100	BFGoodrich	2-1449	1.1" (27.9 mm) S.C.*
A300-B4-200	Messier-Bugatti	C20060-100 Series	1.1" (28.0 mm)
A300-600	Messier-Bugatti	C20060-100 Series	1.1" (28.0 mm)
A300-600	Messier-Bugatti	C20175100	1.1" (50.0 mm)
A300-600	ALS (Bendix)	2607932-1	0.9" (22.9 mm)
A300-600	ALS (Bendix)	2607932-1	1.48" (37.6 mm) S.C.*
A300 B4-600R	Messier-Bugatti	C20210000 Series	1.97" (50.0 mm)
A300 B4-600R	Messier-Bugatti	C20210200 Series	1.97" (50.0 mm)
A300 B4-600R	Messier-Bugatti	C20210500 Series	1.97" (50.0 mm)
A310-200	Messier-Bugatti	C20089000 Series	1.1" (28.0 mm)
A310-200	ALS (Bendix)	2606822-1	1.26" (32.0 mm)
A310-200	ALS (Bendix)	2606822-1	1.5" (38.2 mm) S.C.*
A310-300	Messier-Bugatti	C20194000 Series	1.97" (50.0 mm)
A310-300	Messier-Bugatti	C20194200 Series	1.97" (50.0 mm)
A310-300	ABS	5010995	2.22" (56.39 mm)
A320	Messier-Bugatti	C20225000 Series	1.97" (50.0 mm)
A320	Messier-Bugatti	C20225200 Series	1.97" (50.0 mm)
A320	BFGoodrich	2-1526	1.97" (50.0 mm)
A320	BFGoodrich	2-1526-2	1.97" (50.0 mm)
A320	BFGoodrich	2-1526-5	1.97" (50.0 mm)
A320	BFGoodrich	2-1526-3/-4	2.68" (68.0 mm)
A320	BFGoodrich	2-1572	2.68" (68.0 mm)
A320	ABS	5011075	2.14" (54.36 mm)

Airbus Industrie Model A300, A300-600, A310, and A320 Series Airplanes Equipped with Messier-Bugatti, BFGoodrich, Allied Signal (ALS) Aerospace Company (Bendix), or Aircraft Braking Systems (ABS) Brakes

\* S.C. represents "Service Configured" brakes, which are marked according to the instructions provided in the brake manufacturer's CMM.

Service information sources containing measuring instructions that must be revised to accommodate the new brake wear limits specified in TABLE 3. [(Refer to paragraph (b)(3) of this AD.]

Brake Manufacturer	Part No.	Document/ Chapter	Date/Revision (or later revisions)
FOR MODEL A300	) B2-100 SERIES A	IRPLANES:	
Messier-Bugatti	286349-115	CMM 32-42-27	April 30, 1991
Messier-Bugatti	286349-116	CMM 32-42-27	April 30, 1991
BFGoodrich	2-1449 and S.C.*	CMM 32-44-37 SB 567 (2-1449-32-4)	January 30, 1993 January 30, 1993
FOR MODEL A300	) B4-100 SERIES A	IRPLANES:	
Messier-Bugatti	A21329-41-17	CMM 32-44-37	January 30, 1993
ALS (Bendix)	2606802-3 2606802-4 2606802-5 and S.C.*	CMM 32-42-02 SB 2606802- 32-003	Revision 7/April 30, 1995 March 31, 1993, and Revision 1/October 1, 1993
BFGoodrich	2-1449 and S.C.*	CMM 32-44-37 SB 567 (2-1449-32-4)	January 30, 1993 January 30, 1993
FOR MODEL A300	) B4-200 SERIES A	IRPLANES:	
Messier-Bugatti	C20060-100 Series	CMM 32-44-24	December 31, 1991
ALS (Bendix)	2606802-3 2606802-4 2606802-5 and S.C.*	CMM 32-42-02; SB 2606802- 32-003	Revision 7/April 30, 1995; March 31, 1993, and Revision 1/October 1, 1993
FOR MODEL A300	)-600 SERIES AIRP	LANES:	
Messier-Bugatti	C20060-100 Series	CMM 32-44-24	December 31, 1991
Messier-Bugatti	C20175100	CMM 32-44-50	November 30, 1991
ALS (Bendix)	2607932-1 and S.C.*	CMM 32-42-05; SB 2607932-32- 002; SB 2607932- 32-003	Revision 4/February 15,1992; March 31,1993, and Revision 1/October 1, 1993 May 31, 1995

### FOR MODEL A300 B4-600R SERIES AIRPLANES:

Messier-Bugatti	C20210000 and C20210200 Series	CMM 32-44-51 SB 470-32-675	August 31, 1994 Revision 1/ September 26, 1994
Messier-Bugatti	C20210500 Series	CMM 32-44-68	November 30, 1995

# FOR MODEL A310-200 SERIES AIRPLANES:

Messier-Bugatti	C20089000 Series	CMM 32-46-23	January 31, 1992
ALS (Bendix)	2606822-1 and S.C.	CMM 32-42-03	Revision 5/ January 31, 1991
		SB 2606822-32-	March 31, 1993
		002	

## FOR MODEL A310-300 SERIES AIRPLANES:

Messier-Bugatti	C20194000 and C20194200 Series	CMM 32-46-37 SB 470-32-675	August 31, 1994 Revision 1/ September 26, 1994
ABS	5010995	CMM 32-43-97	February 28, 1991

### FOR MODEL A320 SERIES AIRPLANES:

Messier-Bugatti	C20225000 and C20225200 Series	CMM 32-47-20 SB 580-32-3042	January 31, 1995 Revision 1/June 30, 1995
BFGoodrich	2-1526/-2/-5 2-1526-3/-4 2-1572	CMM 32-44-38 CMM 32-44-38 CMM 32-41-63	March 15, 1993 March 15, 1993 April 29, 1994
ABS	5011075	CMM 32-41-18	February 28, 1991

\* S.C. represents "Service Configured" brakes, which are marked according to the instructions provided in the brake manufacturer's CMM.

**NOTE 4:** Once an operator has complied with the requirement of paragraph (b) of this AD, that paragraph does not require that the operator subsequently record accomplishment of those requirements each time a brake is inspected or overhauled in accordance with that operator's FAA-approved maintenance inspection program.

(c) Prior to installation of any brake having a part number other than those specified in TABLE 3 of this AD, revise the FAA-approved maintenance program to include the provisions specified in paragraph (b) of this AD for that part number brake, that have been approved by the Manager, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Standardization Branch, ANM-113. Operators shall submit their requests through an appropriate FAA Principal

Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

**NOTE 5:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(f) This amendment becomes effective on February 26, 1997.

FOR FURTHER INFORMATION CONTACT:

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