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entry:
  %cquantize1 = getelementptr inbounds %struct.jpeg_decompress_struct,
... %struct.jpeg_decompress_struct* %cinfo, i64 0, i32 83
  %0 = bitcast %struct.jpeg_color_quantizer** %cquantize1 to
... %struct.my_cquantizer**
  %1 = load %struct.my_cquantizer*, %struct.my_cquantizer** %0, align 8, !tbaa
... !2
  %histogram2 = getelementptr inbounds %struct.my_cquantizer,
... %struct.my_cquantizer* %1, i64 0, i32 3
  %2 = load [32 x i16]**, [32 x i16]** %histogram2, align 8, !tbaa !10
  %output_width = getelementptr inbounds %struct.jpeg_decompress_struct,
... %struct.jpeg_decompress_struct* %cinfo, i64 0, i32 26
  %3 = load i32, i32* %output_width, align 8, !tbaa !13
  %cmp61 = icmp slt i32 %num_rows, 1
  %cmp657 = icmp eq i32 %3, 0
  %or.cond = or i1 %cmp61, %cmp657
  br i1 %or.cond, label %for.end27, label %for.body.preheader

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for.body.preheader:
  br label %for.body

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for.body:
  %indvars.iv = phi i64 [ %indvars.iv.next, %for.inc26 ], [ 0,
... %for.body.preheader ]
  %arrayidx = getelementptr inbounds i8*, i8** %input_buf, i64 %indvars.iv
  %4 = load i8*, i8** %arrayidx, align 8, !tbaa !14
  %arrayidx4 = getelementptr inbounds i8*, i8** %output_buf, i64 %indvars.iv
  %5 = load i8*, i8** %arrayidx4, align 8, !tbaa !14
  br label %for.body7

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for.body7:
  %inptr.060 = phi i8* [ %4, %for.body ], [ %incdec.ptr11, %if.end ]
  %col.059 = phi i32 [ %3, %for.body ], [ %dec, %if.end ]
  %outptr.058 = phi i8* [ %5, %for.body ], [ %incdec.ptr25, %if.end ]
  %incdec.ptr = getelementptr inbounds i8, i8* %inptr.060, i64 1
  %6 = load i8, i8* %inptr.060, align 1, !tbaa !15
  %conv = zext i8 %6 to i32
  %shr51 = lshr i32 %conv, 3
  %incdec.ptr8 = getelementptr inbounds i8, i8* %inptr.060, i64 2
  %7 = load i8, i8* %incdec.ptr, align 1, !tbaa !15
  %conv9 = zext i8 %7 to i32
  %shr1052 = lshr i32 %conv9, 2
  %incdec.ptr11 = getelementptr inbounds i8, i8* %inptr.060, i64 3
  %8 = load i8, i8* %incdec.ptr8, align 1, !tbaa !15
  %conv12 = zext i8 %8 to i32
  %shr1353 = lshr i32 %conv12, 3
  %idxprom1454 = zext i32 %shr1353 to i64
  %idxprom1555 = zext i32 %shr1052 to i64
  %idxprom1656 = zext i32 %shr51 to i64
  %arrayidx17 = getelementptr inbounds [32 x i16]*, [32 x i16]** %2, i64
... %idxprom1656
  %9 = load [32 x i16]*, [32 x i16]** %arrayidx17, align 8, !tbaa !14
  %arrayidx19 = getelementptr inbounds [32 x i16], [32 x i16]* %9, i64
... %idxprom1555, i64 %idxprom1454
  %10 = load i16, i16* %arrayidx19, align 2, !tbaa !16
  %cmp21 = icmp eq i16 %10, 0
  br i1 %cmp21, label %if.then, label %if.end

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if.then:
  tail call @fastcc_void_@fill_inverse_cmap(%struct.jpeg_decompress_struct*
... %cinfo, i32 %shr51, i32 %shr1052, i32 %shr1353)
  %.pre = load i16, i16* %arrayidx19, align 2, !tbaa !16
  br label %if.end

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if.end:
  %11 = phi i16 [ %.pre, %if.then ], [ %10, %for.body7 ]
  %conv23 = trunc i16 %11 to i8
  %sub = add i8 %conv23, -1
  %incdec.ptr25 = getelementptr inbounds i8, i8* %outptr.058, i64 1
  store i8 %sub, i8* %outptr.058, align 1, !tbaa !15
  %dec = add i32 %col.059, -1
  %cmp6 = icmp eq i32 %dec, 0
  br i1 %cmp6, label %for.inc26, label %for.body7

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for.inc26:
  %indvars.iv.next = add nuw nsw i64 %indvars.iv, 1
  %lfr.wideiv = trunc i64 %indvars.iv.next to i32
  %exitcond64 = icmp eq i32 %lfr.wideiv, %num_rows
  br i1 %exitcond64, label %for.end27.loopexit, label %for.body

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for.end27.loopexit:
  br label %for.end27

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for.end27:
  ret void

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