```
entry:
%max_to_use = alloca i64, align 8
%ch = alloca i8, align 1
%0 = bitcast i64* %max_to_use to i8*
call void @llvm.lifetime.start(i64 8, i8* %0) #5
%mem1 = getelementptr inbounds %struct.jpeg_common_struct,
... %struct.jpeg_common_struct* %cinfo, i64 0, i32 1
store %struct.jpeg_memory_mgr* null, %struct.jpeg_memory_mgr** %mem1, align
... 8, !tbaa !3
%call = tail call i64 @jpeg_mem_init(%struct.jpeg_common_struct* %cinfo) #5
store i64 %call, i64* %max_to_use, align 8, !tbaa !9
%call4 = tail call i8* @jpeg_get_small(%struct.jpeg_common_struct* %cinfo,
... i64 160) #5
%cmp5 = icmp eq i8* %call4, null
br i1 %cmp5, label %if.then6, label %if.end13, !prof!11
                                                               F
  if.end13:
  %4 = bitcast i8* %call4 to <2 x i8* (%struct.jpeg_common_struct*, i32,
  store <2 x i8* (%struct.jpeg_common_struct*, i32, i64)*> <i8*
  ... (%struct.jpeg_common_struct*, i32, i64)* @alloc_small, i8*
  ... (%struct.jpeg_common_struct*, i32, i64)* @alloc_large>, <2 x i8*
  ... (%struct.jpeg_common_struct*, i32, i64)*>* %4, align 8, !tbaa !17
  %alloc_sarray = getelementptr inbounds i8, i8* %call4, i64 16
  %5 = bitcast i8* %alloc_sarray to i8** (%struct.jpeg_common_struct*, i32,
  ... i32, i32)**
  store i8** (%struct.jpeg_common_struct*, i32, i32, i32)* @alloc_sarray, i8**
  ... (%struct.jpeg_common_struct*, i32, i32, i32)** %5, align 8, !tbaa !18
  %alloc_barray = getelementptr inbounds i8, i8* %call4, i64 24
  %6 = bitcast i8* %alloc barray to [64 x i16]** (%struct.jpeg common struct*,
  ... i32, i32, i32)**
  store [64 x i16]** (%struct.jpeg_common_struct*, i32, i32, i32)*
  ... @alloc_barray, [64 x i16]** (%struct.jpeg_common_struct*, i32, i32, i32)**
  ... %6, align 8, !tbaa !21
  %request_virt_sarray = getelementptr inbounds i8, i8* %call4, i64 32
  %7 = bitcast i8* %request_virt_sarray to %struct.jvirt_sarray_control*
  ... (%struct.jpeg_common_struct*, i32, i32, i32, i32, i32)**
  store %struct.jvirt_sarray_control* (%struct.jpeg_common_struct*, i32, i32,
  ... i32, i32, i32)* @request_virt_sarray, %struct.jvirt_sarray_control*
  ... (%struct.jpeg_common_struct*, i32, i32, i32, i32, i32)** %7, align 8, !tbaa
  %request_virt_barray = getelementptr inbounds i8, i8* %call4, i64 40
  %8 = bitcast i8* %request_virt_barray to %struct.jvirt_barray_control*
  ... (%struct.jpeg_common_struct*, i32, i32, i32, i32, i32)**
  store %struct.jvirt_barray_control* (%struct.jpeg_common_struct*, i32, i32,
  ... i32, i32, i32)* @request_virt_barray, %struct.jvirt_barray_control*
  ... (%struct.jpeg_common_struct*, i32, i32, i32, i32, i32)** %8, align 8, !tbaa
  ... !23
  %realize_virt_arrays = getelementptr inbounds i8, i8* %call4, i64 48
  %realize_virt_arrays20 = bitcast i8* %realize_virt_arrays to void
  ... (%struct.jpeg_common_struct*)**
  store void (%struct.jpeg_common_struct*)* @realize_virt_arrays, void
  ... (%struct.jpeg_common_struct*)** %realize_virt_arrays20, align 8, !tbaa !24
  %access_virt_sarray = getelementptr inbounds i8, i8* %call4, i64 56
  %9 = bitcast i8* %access_virt_sarray to i8** (%struct.jpeg_common_struct*,
  ... %struct.jvirt_sarray_control*, i32, i32, i32)**
  store i8** (%struct.jpeg_common_struct*, %struct.jvirt_sarray_control*, i32,
  ... i32, i32)* @access_virt_sarray, i8** (%struct.jpeg_common_struct*,
  ... %struct.jvirt_sarray_control*, i32, i32, i32)** %9, align 8, !tbaa !25
  %access_virt_barray = getelementptr inbounds i8, i8* %call4, i64 64
  %10 = bitcast i8* %access_virt_barray to [64 x i16]**
  ... (%struct.jpeg_common_struct*, %struct.jvirt_barray_control*, i32, i32, i32)**
  store [64 x i16]** (%struct.jpeg_common_struct*,
  ... %struct.jvirt_barray_control*, i32, i32, i32)* @access_virt_barray, [64 x
  ... i16]** (%struct.jpeg_common_struct*, %struct.jvirt_barray_control*, i32, i32,
  ... i32)** %10, align 8, !tbaa !26
  %free_pool = getelementptr inbounds i8, i8* %call4, i64 72
  %11 = bitcast i8* %free_pool to void (%struct.jpeg_common_struct*, i32)**
  store void (%struct.jpeg_common_struct*, i32)* @free_pool, void
  ... (%struct.jpeg_common_struct*, i32)** %11, align 8, !tbaa !27
  %self_destruct = getelementptr inbounds i8, i8* %call4, i64 80
  %self_destruct25 = bitcast i8* %self_destruct to void
  ... (%struct.jpeg_common_struct*)**
  store void (%struct.jpeg_common_struct*)* @self_destruct, void
  ... (%struct.jpeg_common_struct*)** %self_destruct25, align 8, !tbaa !28
  %max_memory_to_use = getelementptr inbounds i8, i8* %call4, i64 88
  %12 = bitcast i8* %max memory to use to i64*
  store i64 %call, i64* %12, align 8, !tbaa !29
  %small_list = getelementptr inbounds i8, i8* %call4, i64 96
  %large_list = getelementptr inbounds i8, i8* %call4, i64 112
  %13 = bitcast i8* %small_list to <2 x %union.small_pool_struct*>*
  store <2 x %union.small pool struct*> zeroinitializer, <2 x
  ... %union.small_pool_struct*>* %13, align 8, !tbaa !17
  %14 = bitcast i8* %large_list to <2 x %union.large_pool_struct*>*
  store <2 x %union.large_pool_struct*> zeroinitializer, <2 x
  ... %union.large_pool_struct*>* %14, align 8, !tbaa !17
  %virt_sarray_list = getelementptr inbounds i8, i8* %call4, i64 128
  %total space allocated = getelementptr inbounds i8, i8* %call4, i64 144
  %15 = bitcast i8* %total_space_allocated to i64*
  call void @llvm.memset.p0i8.i64(i8* %virt_sarray_list, i8 0, i64 16, i32 8,
  ... i1 false)
  store i64 160, i64* %15, align 8, !tbaa !30
  %16 = bitcast %struct.jpeg_memory_mgr** %mem1 to i8**
  store i8* %call4, i8** %16, align 8, !tbaa !3
  %call33 = tail call i8* @getenv(i8* nonnull getelementptr inbounds ([8 x
  ... i8], [8 x i8]* @.str, i64 0, i64 0)) #5
  %cmp34 = icmp eq i8* %call33, null
  br i1 %cmp34, label %if.end50, label %if.then35, !prof!31
                                                             F
   if.end50:
```

call void @llvm.lifetime.end(i64 8, i8\* %0) #5

CFG for 'jinit\_memory\_mgr' function

ret void