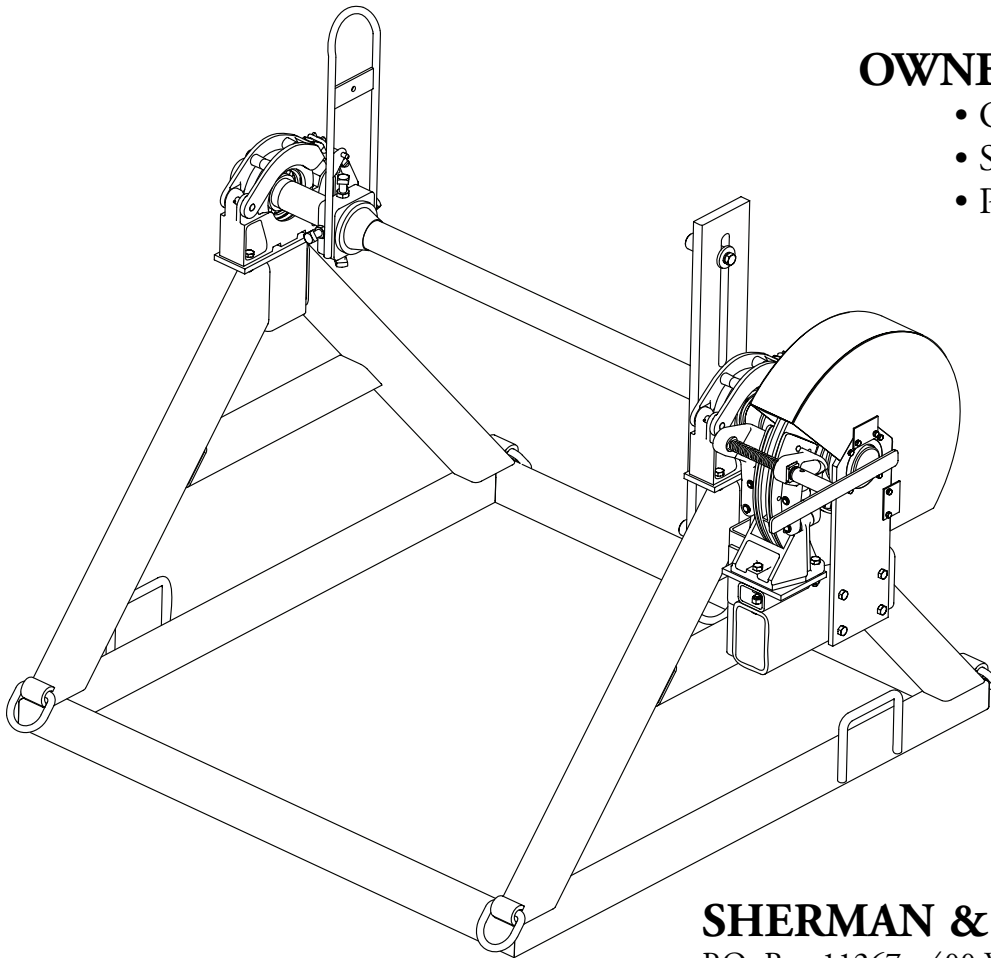




# **CRS** *CONDUCTOR REEL STAND*



## **OWNER'S MANUAL**

- OPERATION
- SERVICE
- PARTS

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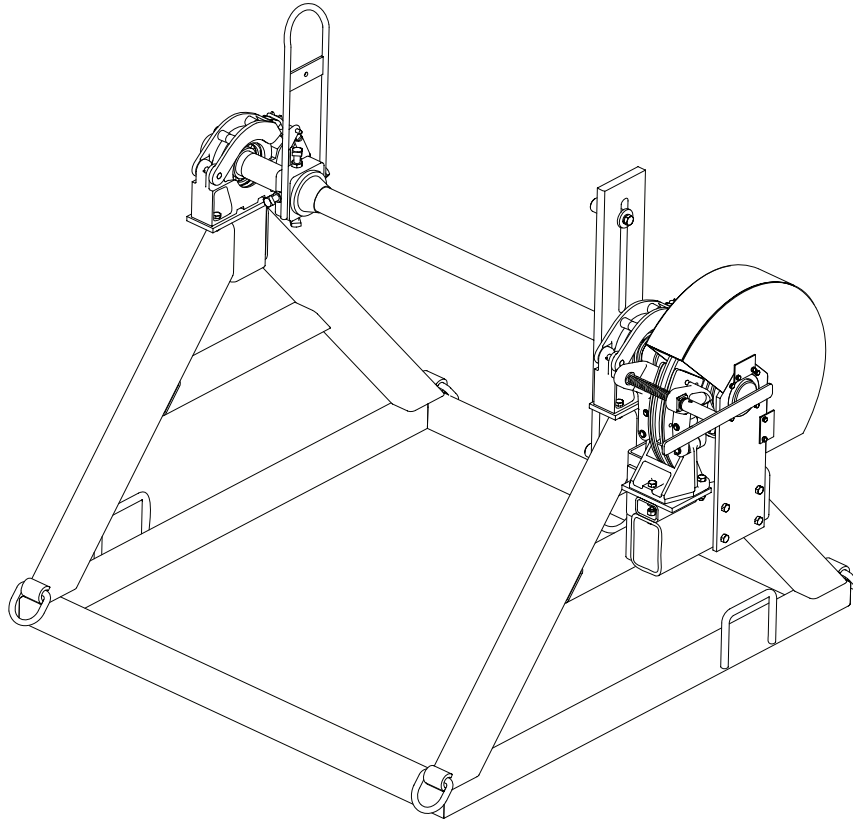
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# INTRODUCTION



## IMPORTANT INFORMATION



It is very important to all of us at *Sherman & Reilly* that all equipment is operated in a safe manner. We have taken every precaution to guard against the possibility of an accident. To properly, safely operate this unit, it is necessary and important that operators and service people read and understand the information in this manual. **ANYONE working around the unit should read the safety precautions in the manuals.**

Be aware each warning and precaution is to help protect against needless injury. Taking unnecessary risks and ignoring warnings is the primary cause of personal injury and fatal accidents in the work place. If you have any questions regarding operation or safety of a procedure or situation, contact the *Sherman & Reilly* Customer Service Manager at **1-800-251-7780**.

This manual was prepared to help the operator use the Conductor Reel Stand in a safe manner. Responsibility for safety during operation and service rests with the person(s) doing the work. Be alert, observe, and practice all safety measures, including OSHA requirements and ANSI standards, to help prevent the possibility of an accident.

This manual is of no value if the operator does not read and understand the instructions and precautions before starting and trying to operate the unit. The operator must be aware of the unit's capacities and limitations. It is the operator's responsibility to watch for situations and conditions which could affect the normal performance of the unit and safety in the work area.

Publication of this manual and the safety precautions in it does not in any way represent an all inclusive list. It is the operator's responsibility to make sure the unit is operated in accordance with all state and local safety requirements and codes, including all applicable OSHA (Occupational Safety and Health Act) and ANSI (American National Standards Institute) regulations.



*Sherman & Reilly* strongly recommends that only persons literate and understanding the English language be considered as operators or service personnel.



# INTRODUCTION

## WARNING TERMS/SAFETY PRECAUTIONS

### WARNING TERMS

Signal words in this manual call the operator's attention to safety concerns.

#### **DANGER**

The word **DANGER** indicates the information relates to a specific immediate hazard which, if disregarded, will result in severe personal injury or death.

#### **WARNING**

The word **WARNING** indicates the information relates to a specific immediate hazard or unsafe practice which, if disregarded, could result in personal injury or death.

#### **CAUTION**

The word **CAUTION** indicates the information pertains to a potential hazard or unsafe practice which, if disregarded, may result in minor personal injury or equipment damage.

#### **NOTE**

The word **NOTE** indicates the information is important to the correct operation or maintenance of the unit.

### OPERATOR SAFETY PRECAUTIONS

#### **DANGER**

*Do not place any part of the body into a potential pinch point. The unit must be turned off and locked out in accordance with OSHA regulations before attempting to correct a problem, working on the unit, or performing regularly scheduled service.*

Do not attempt to operate *Sherman & Reilly* equipment without proper instruction, including reading and understanding the manual.

Obey and enforce all warnings including OSHA requirements and ANSI standards.

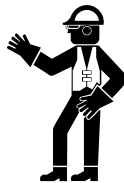
Always wear proper safety equipment as required by employer.

Never bypass safety switches or operate equipment with faulty safety devices.

Be sure all guards and access covers are secure in place when the unit is being operated.

Be aware of people in the work area who may be at risk during operation.

Know all emergency shutdown procedures.



Do not obstruct controls or fire extinguisher.

Make sure fire extinguisher is fully charged.



Never operate equipment while under the influence of any substance which could impair operator ability or judgment. This presents a safety hazard in the work place.

**Always use employer approved grounding procedures when operating the unit.**

Do not operate equipment if work ability is impaired by fatigue, illness, or other causes.

Keep all body parts, head, and limbs away from all moving parts.

Know location and function of all controls, gauges, instruments, and protective devices.

Never use controls or hoses for hand holds.

Do not exceed unit specifications and limitations for weight.

Know where to get help in the event of an emergency or injury.

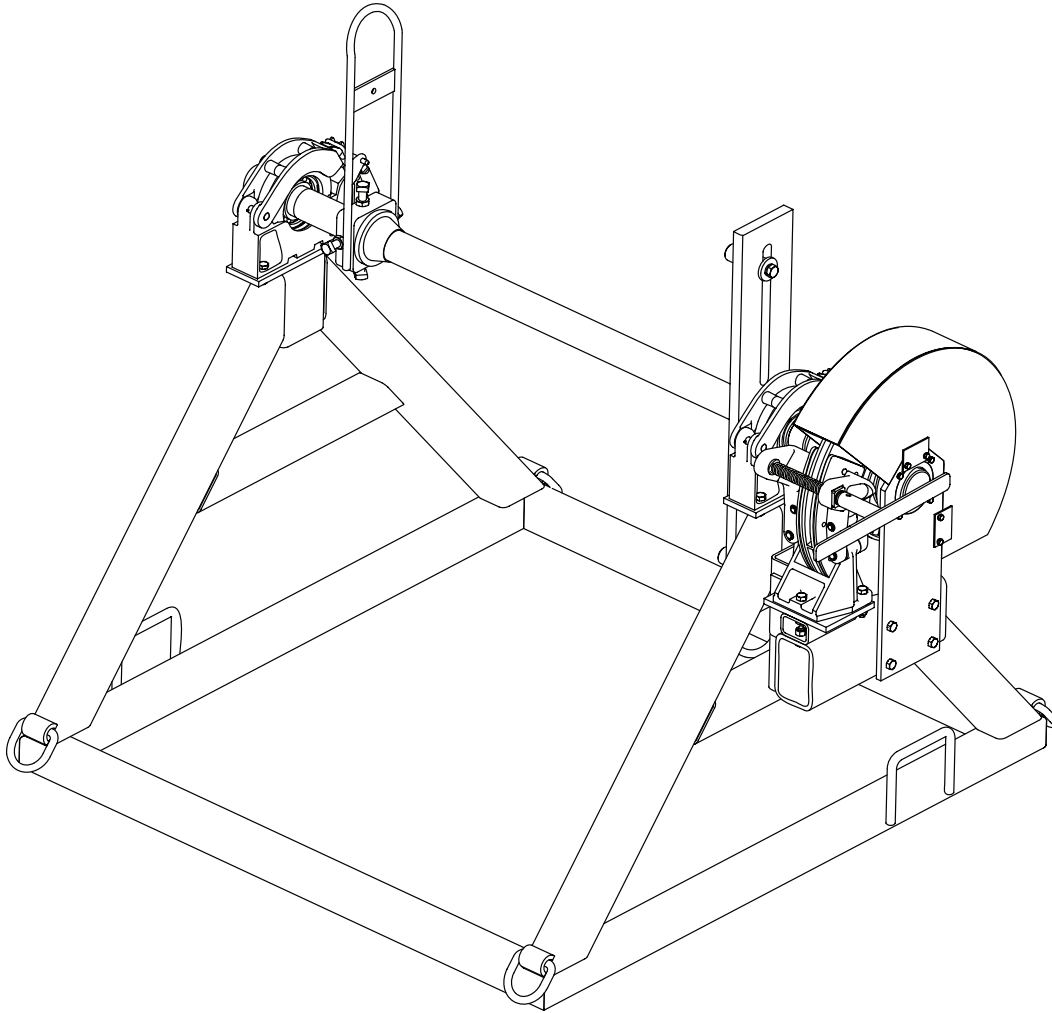


Do not make physical contact with rope or cable as it leaves the reel.



# SAFETY

## EMPLOYER SAFETY REQUIREMENTS



This guideline is intended to assist owners/employers to ensure equipment is serviced and operated in a safe manner. Each job site may have additional situations and conditions which need consideration.

Monitor the operators to be sure they observe and practice safety procedures and operate the support equipment as outlined in this manual. Establish a regular inspection program which includes malfunction reports, inspection, and service records. This inspection should cover the unit condition, adjustment, and ensure all safeguards are in place and functional. Make sure that any malfunction or breakdown that will affect the safe operation of the equipment is properly corrected or repaired before returning unit to service.

The employer shall provide training and instruction in safe methods of work before assigning workers to oper-

ate, service, or repair the equipment. A record of training dates, employee names, and level of training should be maintained. Only persons literate and understanding the English language should be considered to use the ***Sherman & Reilly Conductor Reel Stand***.

Employer shall utilize a lock-out/tag-out procedure which complies with part 1910.147 of Title 29 of the Code of Federal Regulations (OSHA). The procedure will include control of all keys.

The employer will specifically inspect all safety equipment and protective devices on the equipment to ensure they are not bypassed or disabled. Operation of the equipment will not be permitted unless all safety devices are functional and in place. The employer shall meet the appropriate protection requirements for the workers.



## PRE-OPERATION INSPECTION

### NOTE

*It is recommended pre-operation inspection be done before leaving the yard or garage.*

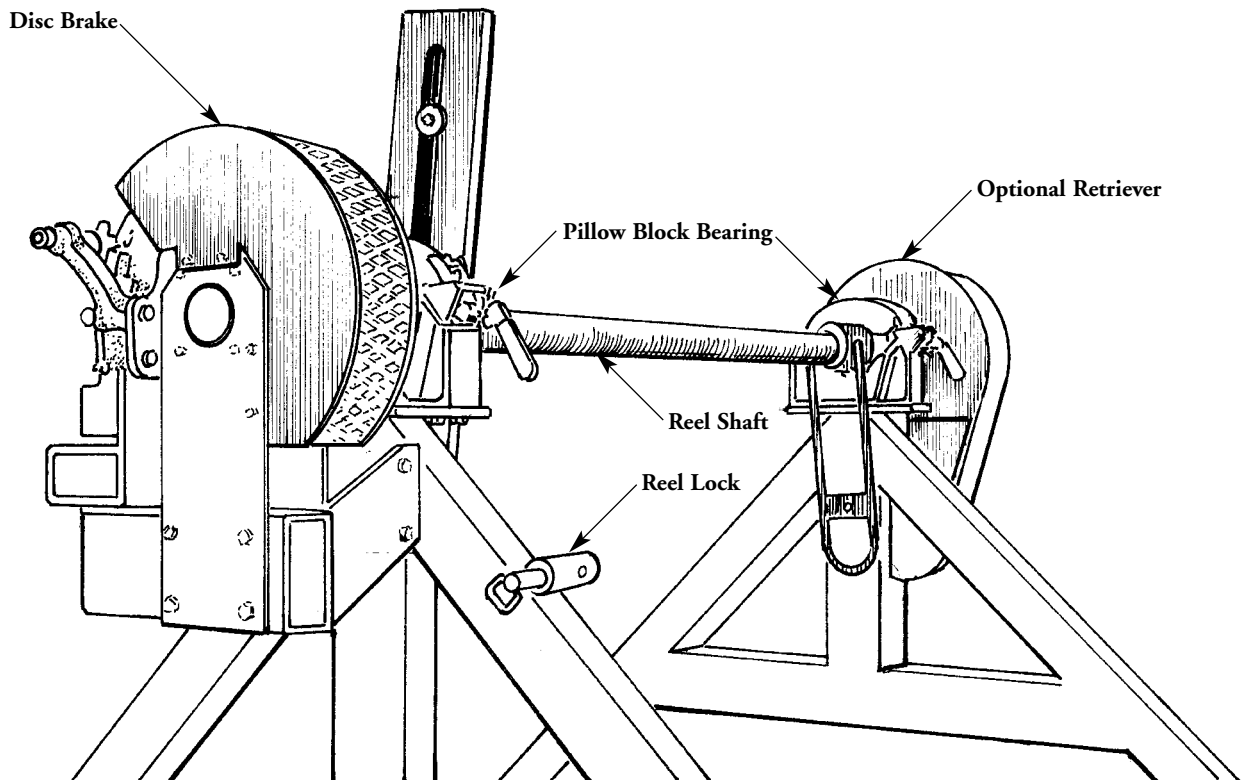
### NOTE

*As you continue the inspection, look for structural damage, bent or broken parts, cracked or broken welds, missing pins and retainers.*

- Inspect pillow block bearings and housings.
- Inspect disc brake assemblies.
- Check reel locks for damage.
- Inspect retriever assembly (when applicable).

### NOTE

*On units with a Power Pack gasoline engine powered system, refer to the engine manufacturer's manual for pre-operation checks and maintenance of the engine.*





# OPERATION

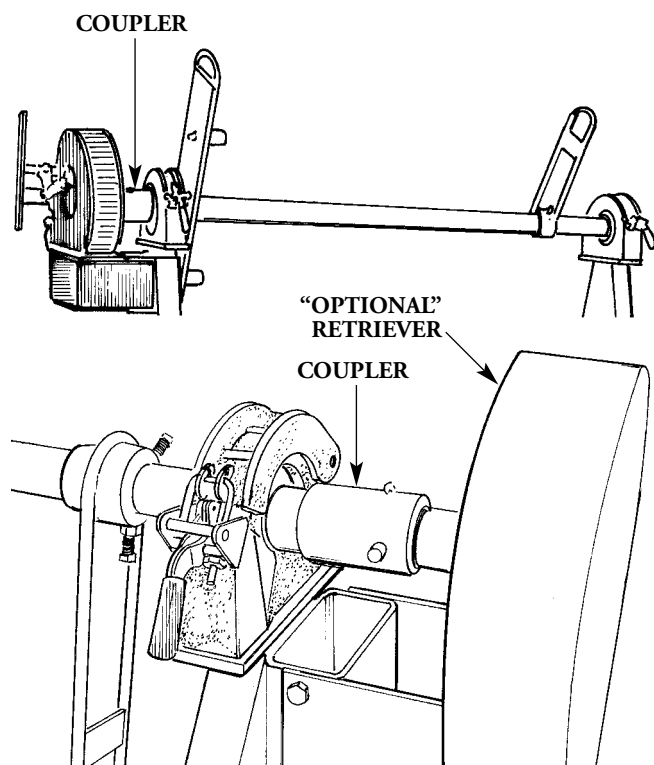
## REEL INSTALLATION/REMOVAL

The procedure for installing or removing a reel is the same for all types of reels.

### ⚠ CAUTION

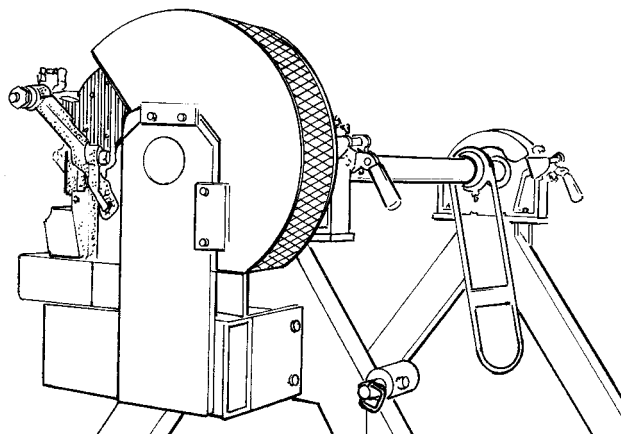
*Make sure there is adequate overhead clearance with no obstructions before attempting to remove or install a reel.*

- Disengage the payout brake coupler from the reel shaft.



### NOTE

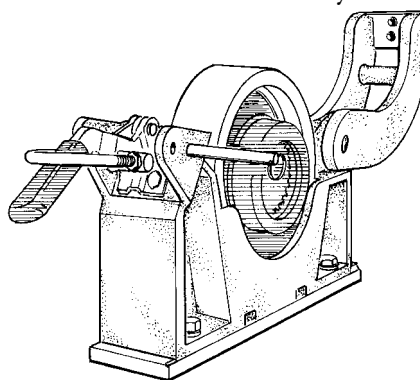
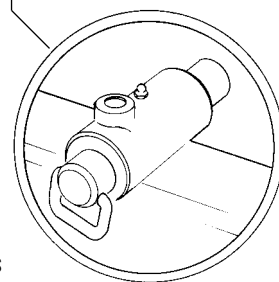
*On units with optional hydraulic retriever, the retriever must be disengaged.*



### NOTE

*Make sure the reel locking pin is unlocked.*

- Remove the locking pins and unlatch the pillow block housing on both sides. Rotate the top of the housing to the full open position and make sure the latch is folded back out of the way.



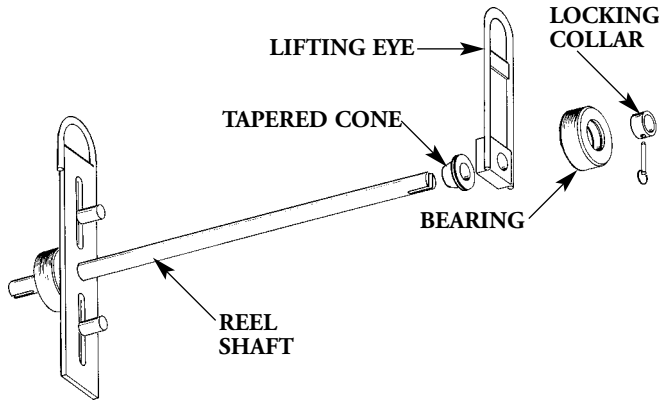
- Use a spreader bar on the chains to the lifting device to lift the reel and drive bar assembly up out of the pillow block housing.

### ⚠ CAUTION

*Lift straight up keeping the bar level with the unit to prevent the bearings from binding in the pillow block housings and possibly causing damage to the unit.*

## REEL INSTALLATION/REMOVAL

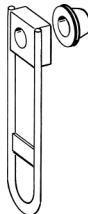
- Remove the bearing from the end of the drive bar, loosen the set screws and remove the lifting eye/tapered cone.



### NOTE

*The conductor reel should be placed so that the conductor will feed off the bottom of the reel, through the fairlead window, to the front of the unit.*

- Slide the drive bar into the reel to be installed. Adjust the drive pins if necessary.
- Slide the reel lifting eye/tapered cone onto the drive bar.



### NOTE

*Two (2) sizes of tapered cone lifting collars are provided. Be sure to use the proper size based on the diameter of the arbor hole.*

### NOTE

*The tapered cone is turned in and slid into the arbor hole on wooden reels when necessary to stabilize the reel.*

- Align the reel lifting eye with the lifting eye on the drive bar and tighten the set screws.
- Slide the bearing into place on the drive bar.
- Attach the lifting device chains with a spreader bar to the reel and drive bar lifting eyes.
- Position the reel over the pillow block housings and lower the reel into place.

### NOTE

*Lower the reel straight and level with the unit to keep the bearings from binding in the pillow block housings as the reel is lowered into position.*

- Remove the lifting device, close, latch and secure the pillow block housings with the locking pins.
- Rotate the reel by hand to make sure it moves freely and turns correctly.



# OPERATION

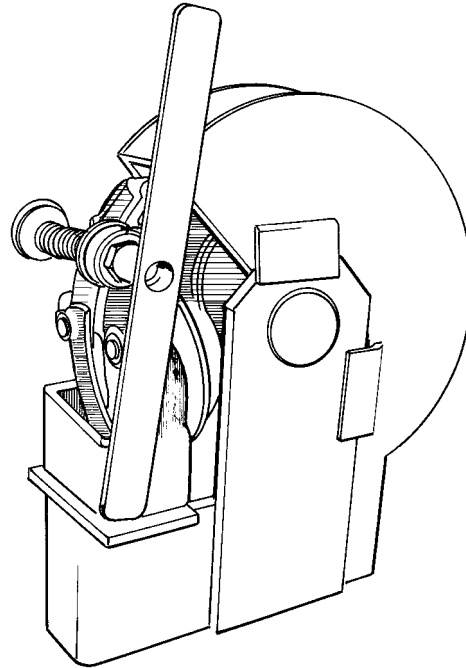
## PAYOUT BRAKE & HYDRAULIC RETRIEVER

### PAYOUT BRAKE

The payout brake is used to add tension to the reel and provide even control of the conductor during stringing operations. The tension is provided by an adjustable disc brake assembly. Adjustment may be manual or hydraulic. To add tension, rotate the control clockwise. To release tension, rotate the control counter-clockwise. A pinned locking collar is used to disengage the brake from the reel shaft during the loading and unloading procedure.



*Make sure the payout brake is disconnected before attempting to remove the reel shaft.*

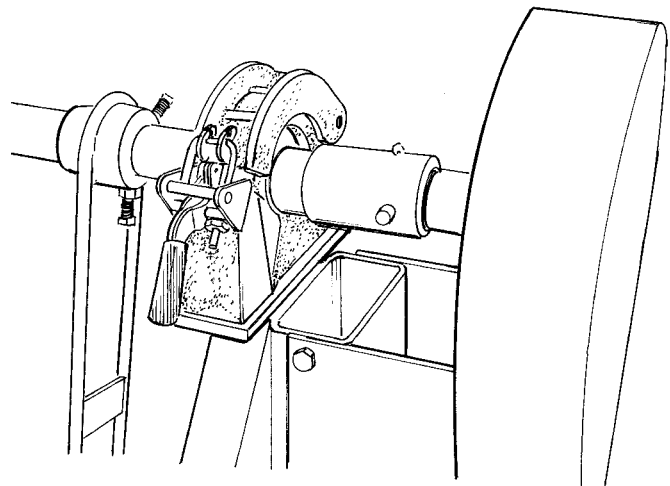


### HYDRAULIC RETRIEVER (Optional)

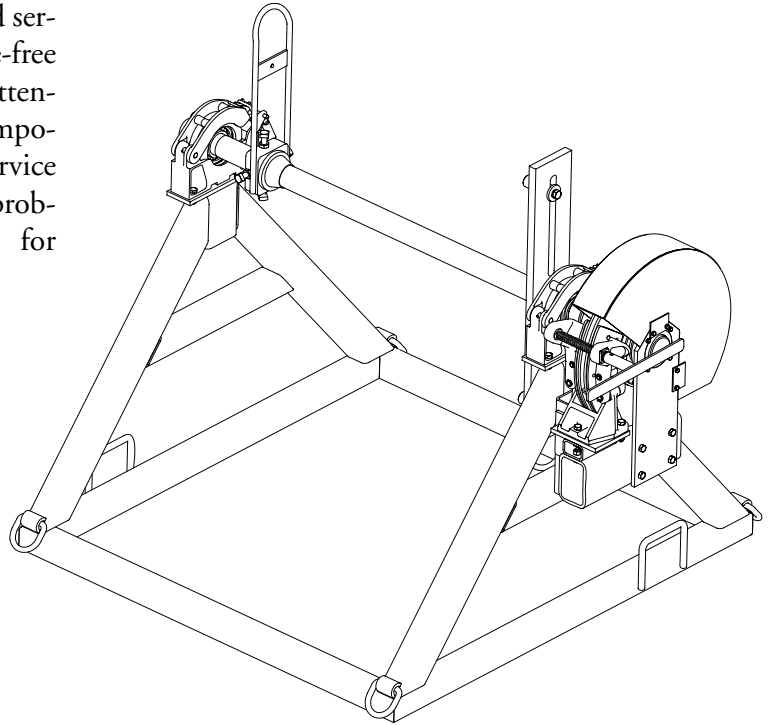
The retriever device is intended for rewinding only short sections of conductor on the reel. The unit is engaged by connecting the drive shaft to the reel shaft with a sliding coupling.



*This unit was designed to retrieve loose cable or rope and should not be used as a "puller".*



Close attention to proper preventive measures and service procedures will ensure and extend trouble-free operation of equipment. Proper lubrication and attention to the bearings, brake pads and structural components are vital. The objective of scheduled service should be to anticipate and prevent operational problems before they require extended shutdown for repairs.



## IMPORTANT INFORMATION

### **WARNING**

*The service guidelines outlined in this manual are effective methods. These guidelines are not all inclusive. Anyone who performs service or repair on a Sherman & Reilly unit must be completely satisfied that no one's safety will be jeopardized and take responsibility for these actions.*

If there are any questions about safety, procedure or precautions, contact **Sherman & Reilly** at **1-800-251-7780** before attempting to do the work.

Service should be scheduled to allow adequate time so the procedure can be completed correctly. It must be done by skilled, trained service personnel with a good basic knowledge of equipment, procedures, and safety practices.



Accurate records should be kept of all service and repairs.

## POWER PACK SERVICE

- Replace broken or missing parts with **Sherman & Reilly** factory authorized parts.
- Keep all fluids at their proper level.
- Clean the unit regularly and keep it as clean as possible during operation.



# SERVICE

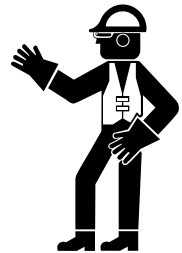
## SAFETY PRECAUTIONS

- Make sure the unit is locked out in accordance with OSHA requirements.
- Make sure that all precautions are taken to support components before loosening or removing bolts.
- Make sure nothing will move or drop when loosening a connection.
- Use oil-dry or some absorbent material to soak up any fluid spills to keep working surfaces from becoming slippery.
- Be sure everyone involved in the maintenance, service or repair process understands what is being done and all of the safety precautions which need to be taken during the procedure.

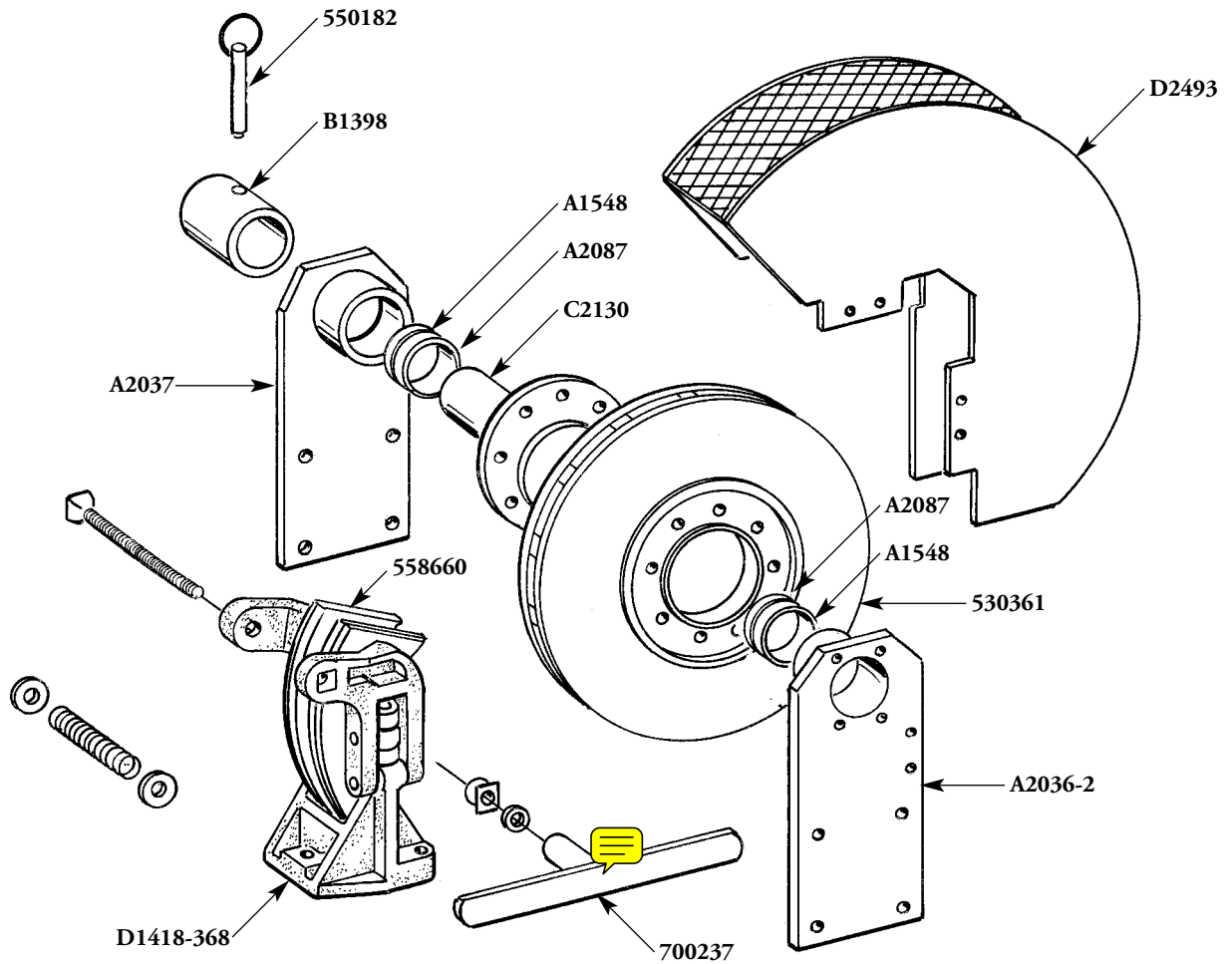
- Take all fire prevention safety measures before using a welder or cutting device, including grinders. Have a fully charged fire extinguisher near the location of the work.



- Make sure all lifting devices, chains, slings, and hooks are in good condition and have the rated capacity to do the job. Use guide lines when necessary for control during the lifting process.
- Always wear proper protective clothing and equipment when performing service: gloves, safety glasses, etc.



## 20" PAYOUT BRAKE ASSEMBLY

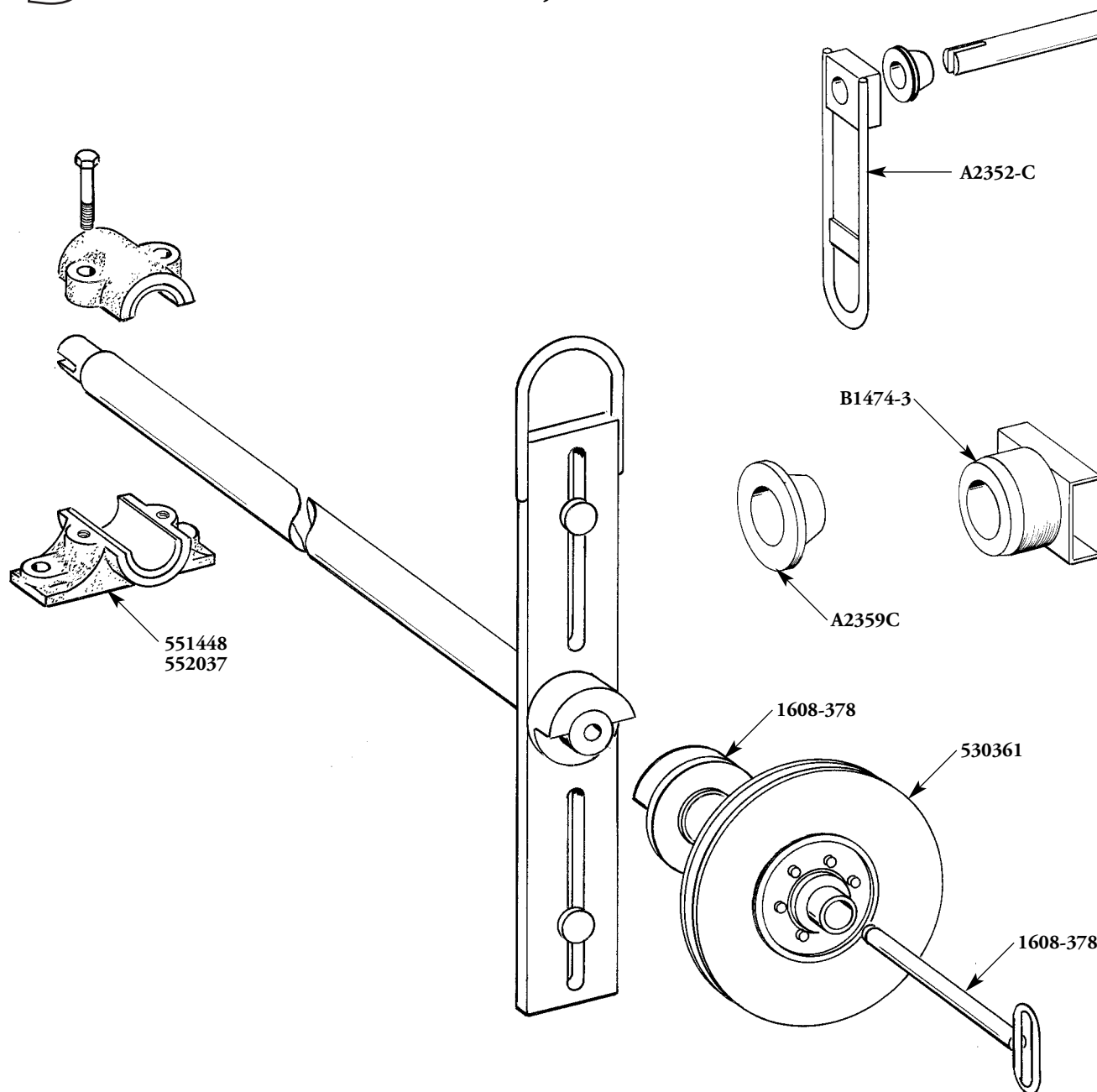


Part #	Description	Qty.
305414	20" Caliper Assembly	1
530361	Ventilated Brake Disc 530361	1
550182	Detent Pin	1
558660	Brake Pads "replacement"	1
700237	T-Handle Assembly #7	1
A1548	Bushing 5-093-004	2
A2036-2	Support	1
A2037	Support	1
A2087	Spacer Washer	2
B1398	Coupler	1
C2130	POB Shaft	1
D2493	Guard 20" POB	1



# PARTS

## REEL SHAFT ASSEMBLY, 20K MODELS

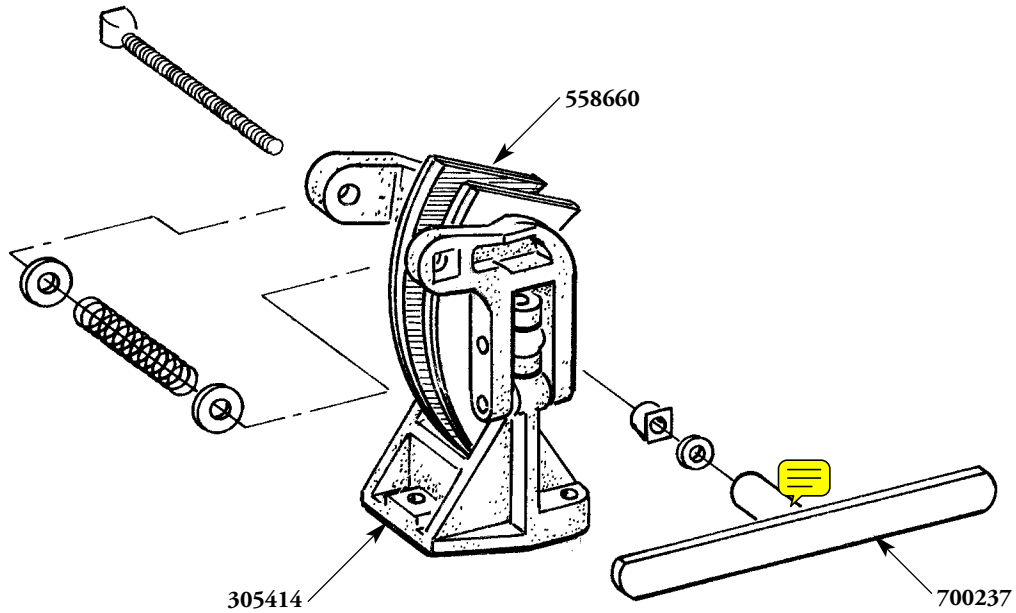


Part #	Description	Qty.
1608-378	Brake Drive Shaft	1
1608-378	Brake Locking Pin	1
530361	20" Ventilated Brake Disc 530361	1
551448	Bearing, 2 Bolt	1
552037	Bearing, 4 Bolt	1
A2352-C	Reel Shaft Lifting Collar, 3 <sup>15</sup> / <sub>16</sub> "	1
A2359-C	Tapered cone, 4" shaft, 5" arbor	1
B1474-3	Shaft Adapter, 4" shaft, 5" arbor	1



## 20" BRAKE ASSEMBLY

### STANDARD "T" HANDLE

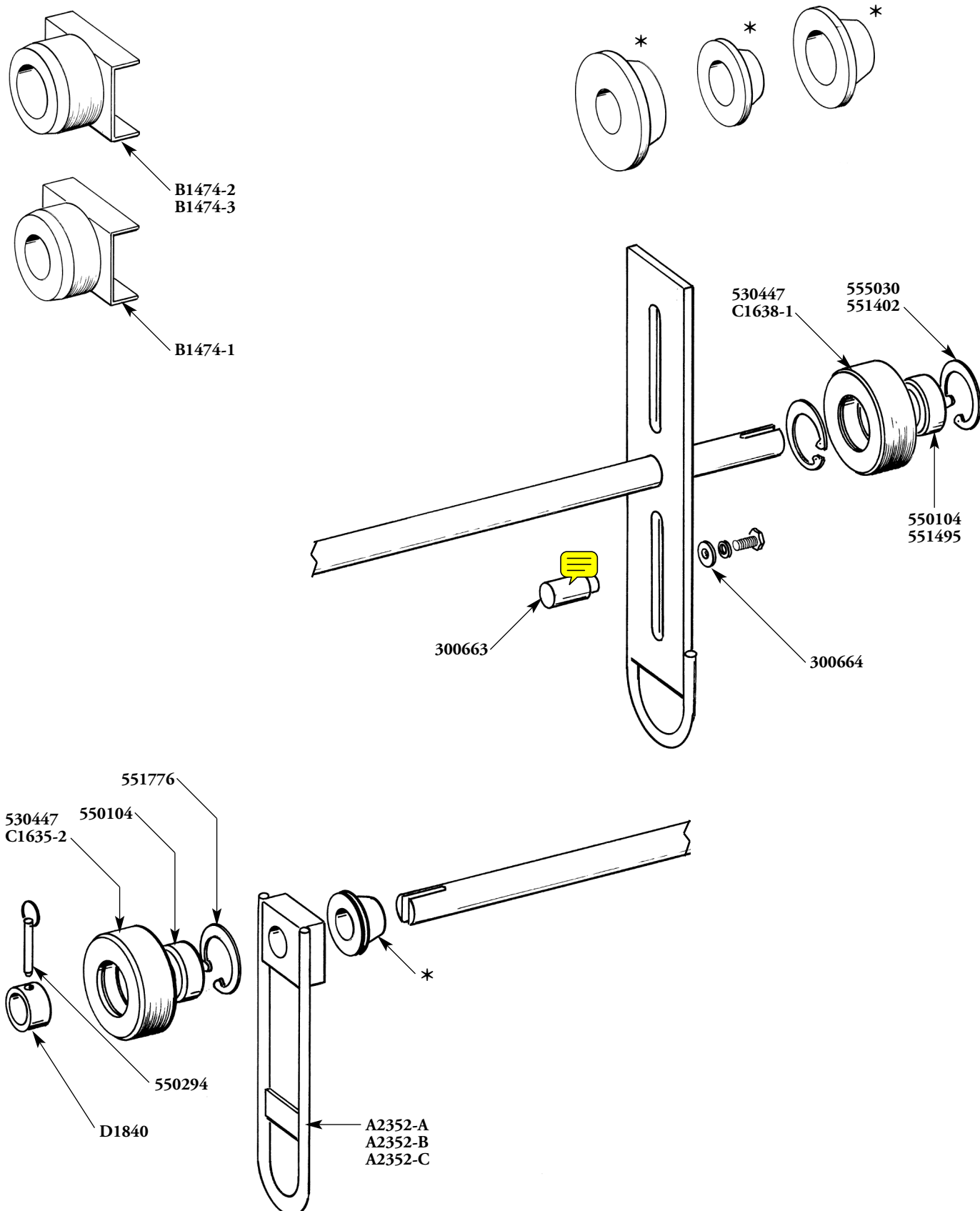


Part #	Description	Qty.
305414	Caliper Assembly, 20"	1
558660	Brake Pad (Set of 2), 20"	1
700237	T Handle Assembly	1



# PARTS

## REEL SHAFT ASSEMBLY



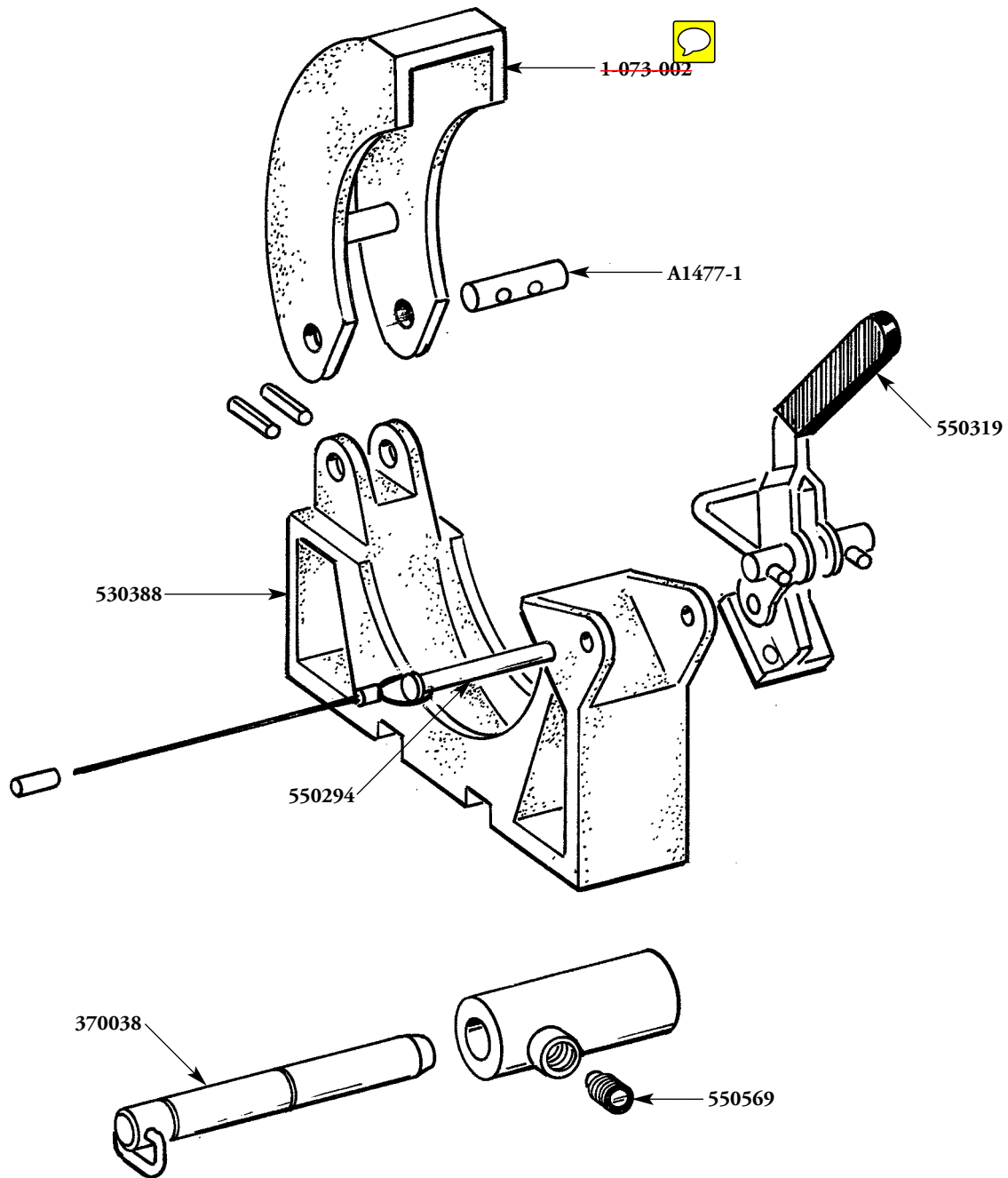
## REEL SHAFT ASSEMBLY

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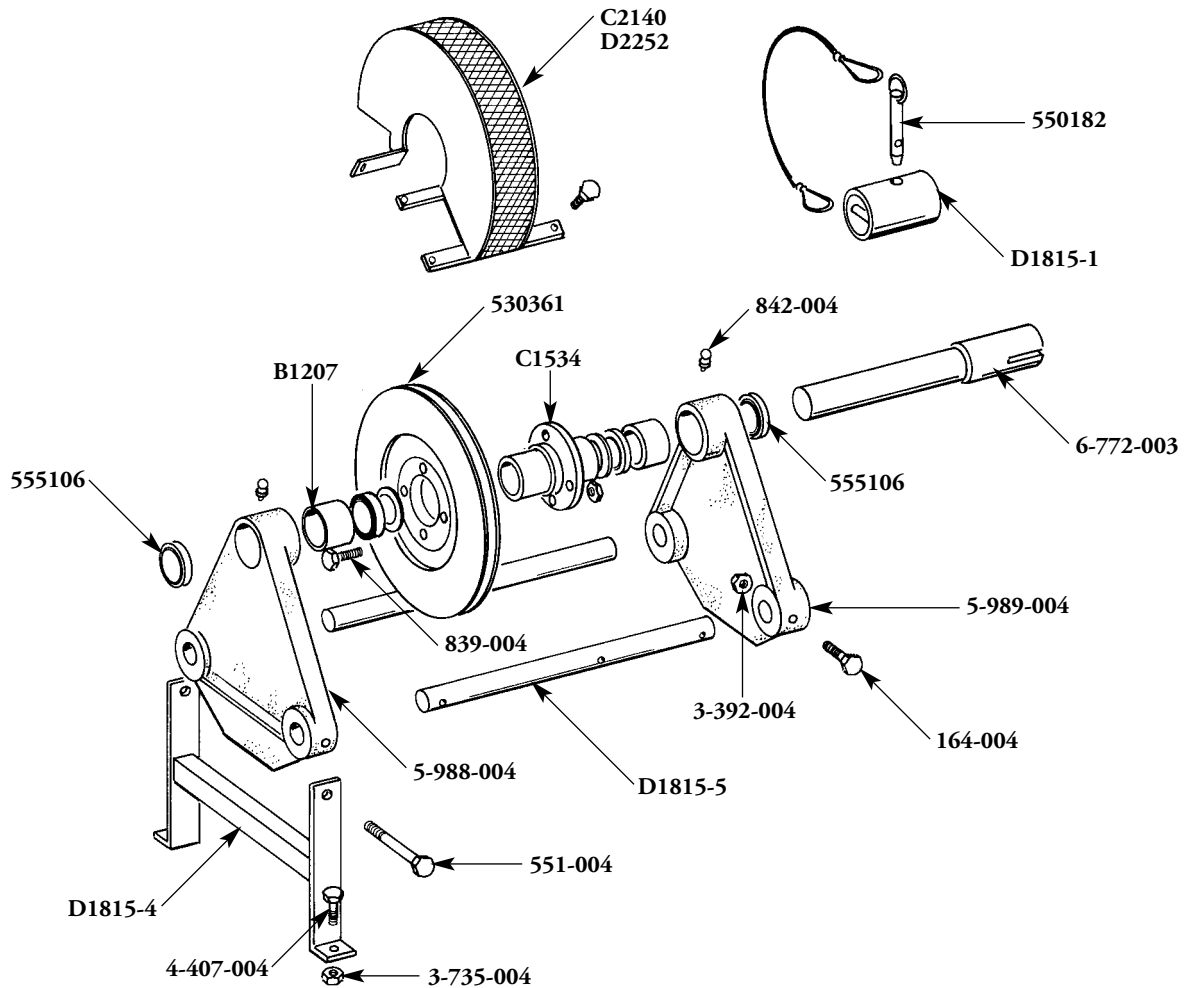
# PARTS

## PILLOW BLOCK ASSEMBLY



Part #	Description	Qty.
370038	Reel Stop Pin	2
530274	Pillow Block Cap	2
530388	Pillow Block Base	2
550294	Detent Pin	2
550319	Toggle Clamp	2
550569	Spring Plunger	2
A1477-1	Pivot Pin	1

## “OLD STYLE” PAYOUT BRAKE ASSEMBLY

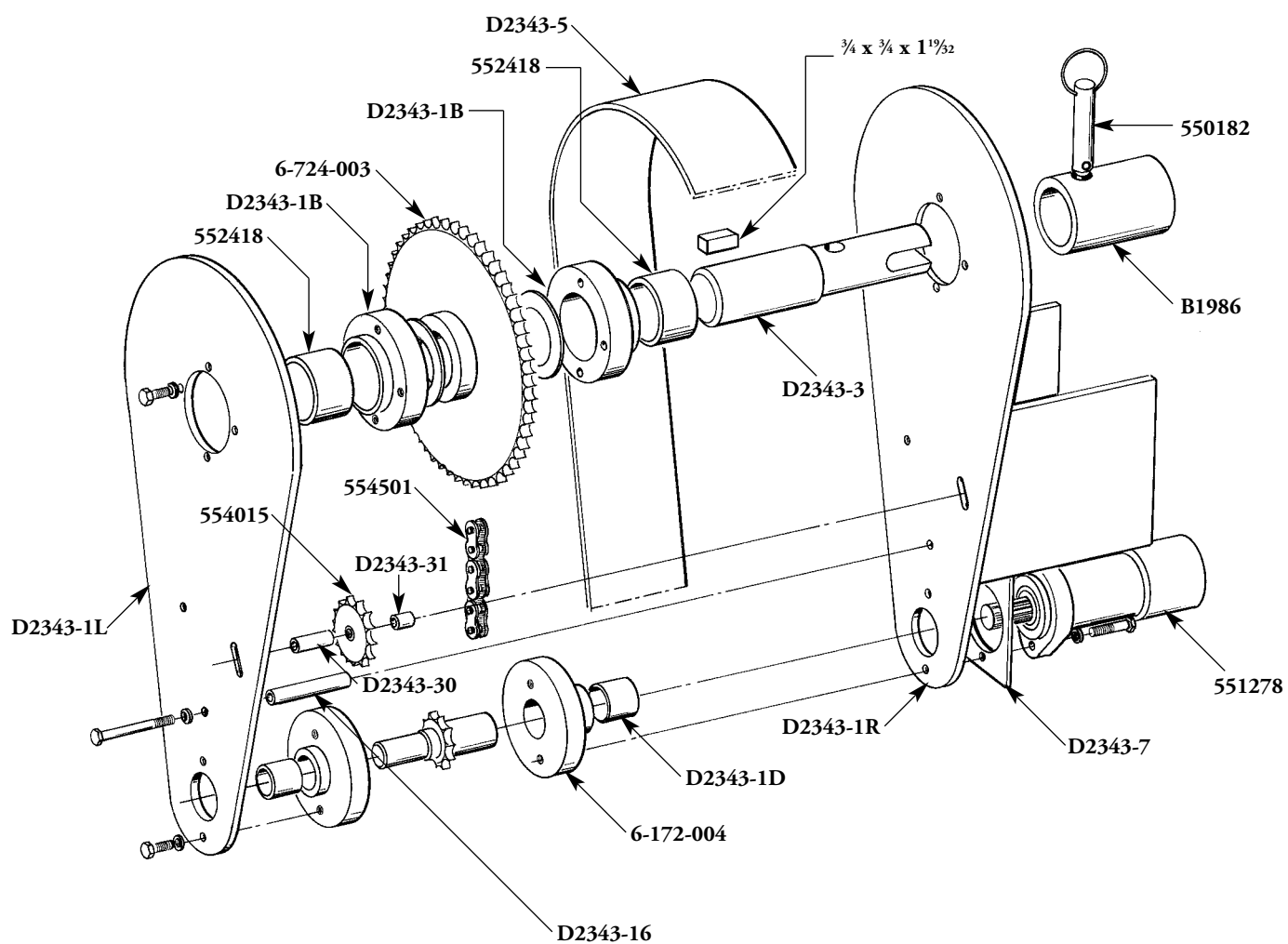


Part #	Description	Qty.
5-988-003	Housing Outside	1
5-989-003	Housing Inside	1
6-772-003	Payout Brake Drive Shaft	1
530361	Ventilated Brake Disc 20" 305414	1
550182	Detent Pin	1
555106	Seal	4
B1207	Bronze Bushing	4
C1534	POB Hub	1
C2140	POB Guard	1
D1815-1	Brake Coupling	1
D1815-3	POB Drive Shaft	1
D1815-4	Brake Support	1
D1815-5	POB Support Rod	2
D2252	POB Guard	1



# PARTS

## RETRIEVER DRIVE ASSEMBLY



## RETRIEVER DRIVE ASSEMBLY

[illegible]



## PARTS

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