
Galiso CRT-1

Collar Removing Tool

CRT-1 (with pump): GPN 14-51-1400

CRT-1S (w/o pump) GPN 14-51-1409

INSTALLATION AND OPERATIONS MANUAL

Warning! Warranty is voided if Enerpac® Oil is not used exclusively in the foot pump.



MANUAL NUMBER 21-11-1060

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1.0 Introduction

The CRT-1 Collar Removing Tool is a universal tool designed to remove any collar from any cylinder in 30 seconds or less. The CRT-1 fits over collars without twisting and removes the collar by use of hydraulic ram force. The collar is released from the tool with a single action from both release handles. The CRT-1 is provided with a Lifting Eye for use with an overhead hoist.

2.0 Specifications

Dimensions: 10"H X 10.5" Dia.

Weight: 27 Lbs.

Capability: Removal of a minimum of 60 collars per hour. Collar removal time is approximately 20 seconds. Ram return time is approx. 20 seconds.

Removing Force: 25 tons

Collar Size: 3" - 3.25" Dia. For standard sized collars. Other sizes available.

Requirements:

Hydraulic: 10 cu. in. per minute at 10,000 PSI.

Hydraulic Oil: Viscosity 100 min.

An air operated 10,000 PSI Hydraulic Foot Pump is available. GPN 14-41-1410. Air supply line of .375" I.D. @ 90 PSI is required.

3.0 Safety

1. Read all instructions before attempting to install or operate the CRT-1. GALISO INCORPORATED CANNOT BE RESPONSIBLE FOR DAMAGE OR INJURY CAUSED BY UNSAFE USE, MAINTENANCE OR APPLICATION OF THIS MACHINE. Contact Galiso for guidance when you are in doubt about any safety precautions at any time.
2. Face shield and gloves are mandatory PPE (Personal Protection Equipment) for the SRT-1.
3. Always use 2 hands to hold the CRT-1 in place.

4. The CRT-1 release handles must be upright/vertical in position before applying hydraulic pressure.
5. NEVER put fingers or hands in the jaws when hydraulic supply is connected.
6. Do not operate the CRT-1 if it has worn or broken parts. Contact Galiso Customer Service at 800-854-3789 for replacement parts.
7. Do not attach a worn or cracked hydraulic line to the CRT-1.
8. Keep a clean, dry floor area for proper footing while operating the CRT-1.
9. Do not operate the CRT-1 under flammable, volatile, or toxic conditions.
10. For safe grabbing and holding of the CRT-1, keep it clean and dry with no hydraulic oil on or around it.

4.0 Installation

The only facility requirement is 90 - 120 PSI (6.2 - 8.2 bar) shop air supply.

5.0 Operation

1. Carefully follow the installation procedure, described in Section 4, to assure the proper connection to the correct hydraulic supply.
2. Read the instruction manual prior to using the CRT-1.
3. Wear protective face shield and gloves at all times while using the CRT-1.
4. Place the CRT-1 fully over the collar to be removed. Make certain that the release handles are in the REMOVAL POSITION (handles vertical, next to the hydraulic cylinder).
5. Apply hydraulic pressure to the CRT-1. If using the Galiso Air Operated Hydraulic Foot Pump, actuate the foot pedal to apply pressure. This will extend the hydraulic ram and pull the collar off the cylinder neck.
IMPORTANT: Never apply hydraulic pressure to the CRT-1 with the handles in the release position (horizontal, away from the cylinder).
6. Relieve the hydraulic pressure from the CRT-1 to retract the ram. Apply pressure to the heel end of the foot pedal to retract the ram.

7. Lift the CRT-1 and extracted collar off the cylinder and move the release handles outward to the RELEASE POSITION. This will release the collar from the CRT-1.

IMPORTANT: Be certain that all pressure has been released, and the ram adapter block is in the fully retracted position before reapplying hydraulic pressure. If the adapter block is not fully retracted, the collar will not be grasped completely, and the CRT-1 may be damaged.

8. If the collar has not been pulled free of the cylinder after the complete actuation of the ram, release the hydraulic pressure, release the collar, allow the ram adapter to fully retract and repeat the removal process.

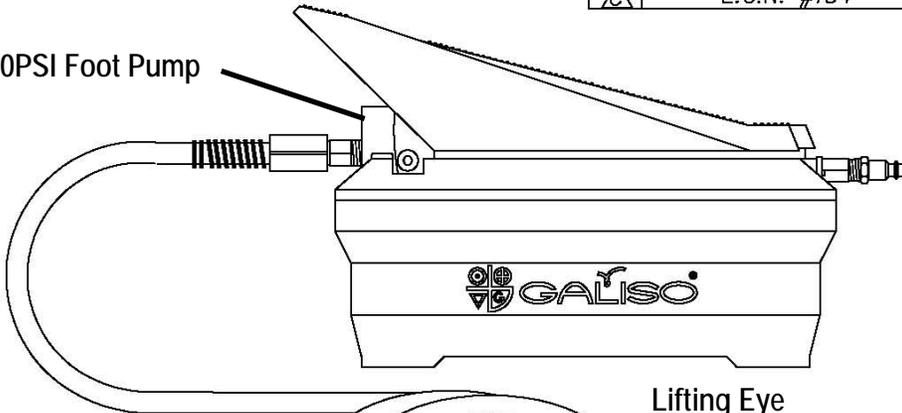
6.0 Maintenance

1. Check the jaws and release bolts, periodically for wear. Do not operate the CRT-1 if it has worn or broken parts. Replacement parts are available from Galiso.
2. Inspect the hydraulic fittings for leaks or signs of wear. Replace the fittings if needed.
3. Regularly clean or replace the filter element that supplies air to the hydraulic supply.
4. **Maintain a full level of Enerpac[®] oil in the foot pump.** Check the sight glass in the front of the pump, and keep the level half way in the middle of the sight.
5. Regularly check all lines for leaks. Repair or replace damaged lines as needed. Do not operate the CRT-1 with a worn or cracked hydraulic line.
6. Check the jaws inside of the CRT-1 daily (or more) to ensure that the internal area is free from debris.
7. Check the adapter inside of the CRT-1 for tightness.
8. When replacing the Enerpac 20 ton ram, leave only 11 or 12 threads showing above the housing.

DRAWING # 14-51-1400		SHEET : 2 OF 2		
REV.	DESC.	DATE	BY:	APP.
A	PROD RELEASE			
B	PROD RELEASE	3/24/93	G.N.	C.H.
C	E.C.N. #134	6/16/93	G.N.	



10,000PSI Foot Pump



Lifting Eye

Release Handle x 2

3/8" NPT Hydraulic Connection

Hydraulic Cylinder

Release Bolts

Release Ring

Main Body

7	4	EA	62-79-2012	BOLT, SOCKET HEAD, 1/4"-20 x 2.5" LG.
8	2	EA	63-79-0005	WASHER, LOCK, 1/2"
5	2	EA	62-79-0101	BOLT, HEX HD, 1/2"-13 x .75" LG.
4	1	EA	14-41-1408 B	LIFTING EYE ASSEMBLY
3	1	EA	14-31-1407 B	THREADED ADAPTER BLOCK
2	1	EA	38-11-6072	CYLINDER, HYDRAULIC, 25 TON, 1" STROKE
1	1	EA	14-41-1405 C	BODY WELD ASSEMBLY

14	1	EA	38-11-3071	PUMP, HYDRAULIC, 10000 PSI
13	1	EA	41-11-2513	HOSE, HYDRAULIC, 8" LG.
12	5	EA	62-79-9024	SREW, SET, 1/4"-20 x .375 LG.
11	1	EA	14-41-1406 B	JAW MODIFICATION
10	1	EA	43-41-8035 A	CRT-1 LABEL KIT
9	1	EA	14-31-1404 B	RELEASE RING
8	4	EA	63-79-0020	WASHER, FLAT, 1/4"

MATERIAL

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**COLLAR REMOVING TOOL-1
CRT-1**

DRAWN	S.BROWN	DATE	8/28/91
TEAM LEADER	HUE LE	DATE	3/25/93
Q.A.	W. BACUS	DATE	3/25/93

DRAWING NUMBER	14-51-1400	NEXT ASSEMBLY	N/A	SHEET	2 OF 2	REVISION	C
UNLESS OTHERWISE SPECIFIED - TOLERANCES ARE:							
.X = ± N/A		.XX = ± N/A		.XXX = ± N/A		E.C.N.	#134

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