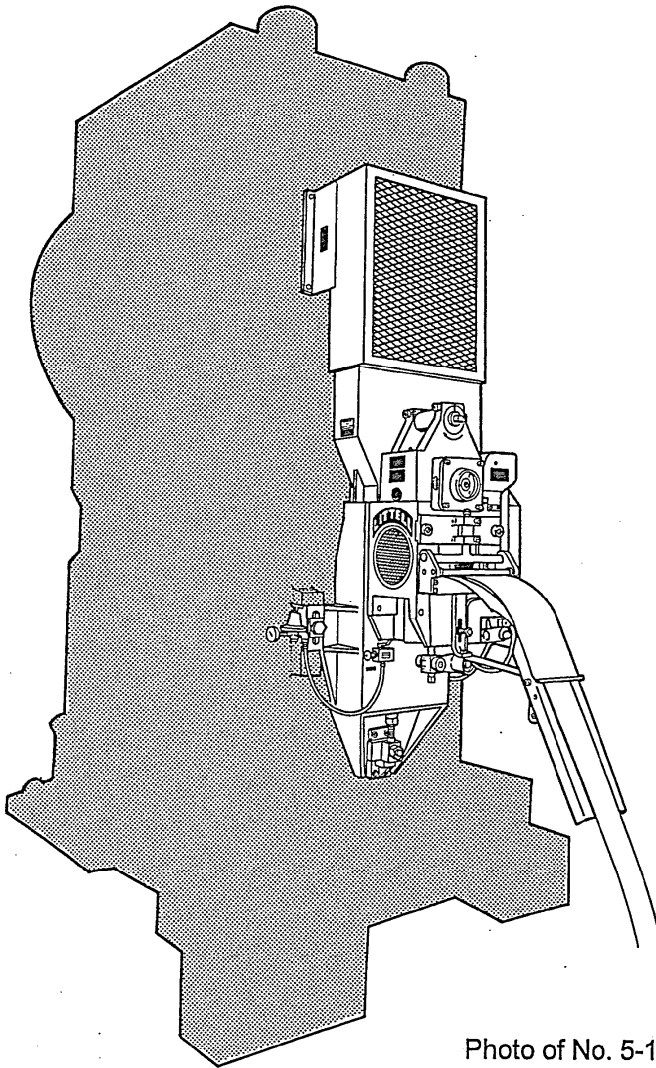


No. 5-12 Cam Driven Roll Feed**SERVICE BULLETIN
NUMBER SD-141**

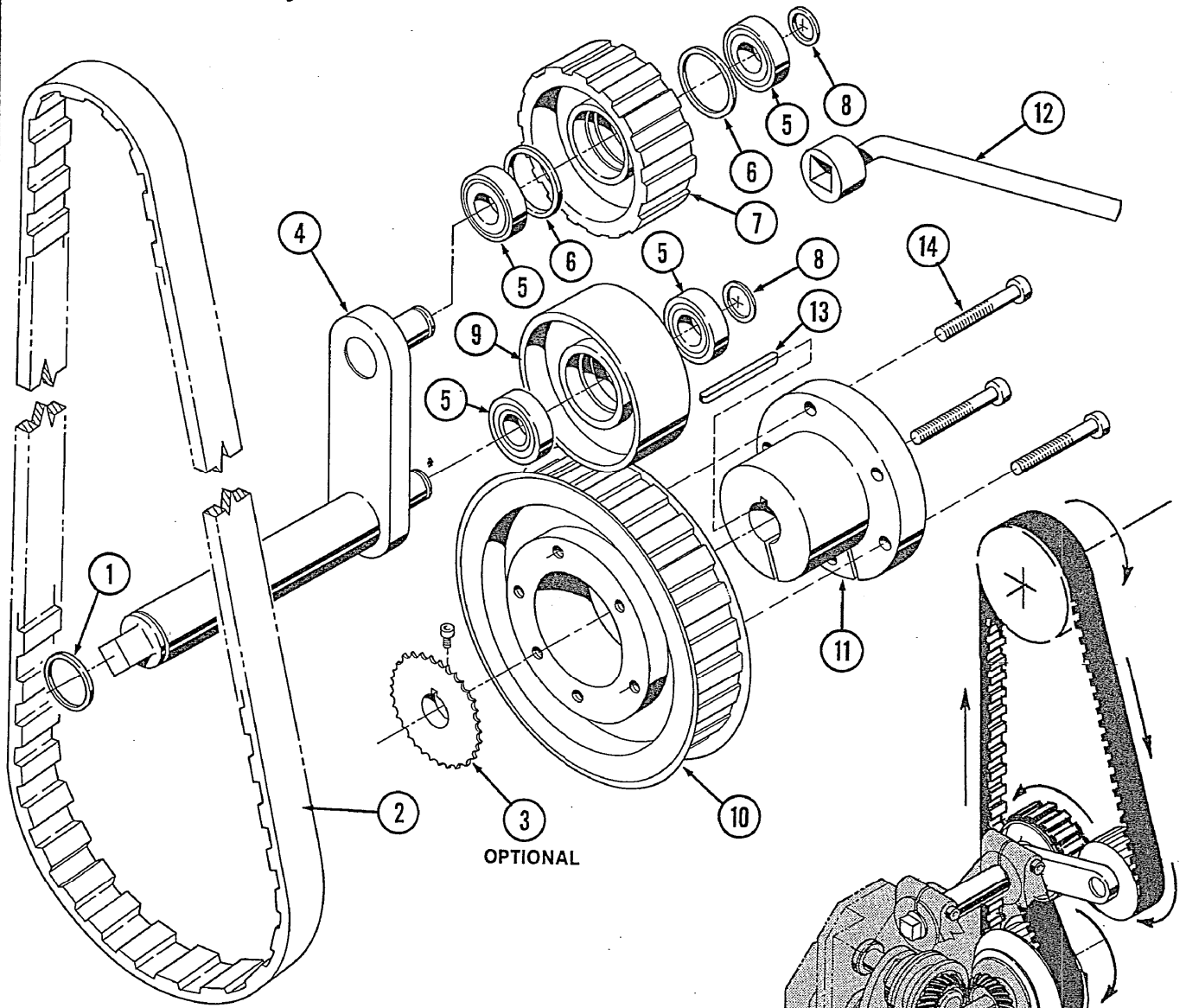
The following 14 pages contain exploded views of the No. 5-12 Cam Driven Roll Feed. The views and part lists are organized in a sequence of Power Transmission Input Section first, then proceeding section by section through entire Cam Feed.

| Index to Exploded Views | Page |
|--------------------------------|-------------|
| Drive Belt & Pulleys | 2 |
| Bevel Gearing - Input shaft | 3 |
| Cam Drive & Follower | 4 |
| Gear Train | 5 |
| Upper Roll & Drive Shaft | 6 |
| Lower Idler Roll & Guides | 7 |
| Air Spring & Linkage | 8 |
| Lifter Eccentric Drive | 9 |
| Stock Guide | 10 |
| Press Adaptor Plate | 11 |
| Lubrication Systems | 12 & 13 |
| Safety Guards | 14 |

Photo of No. 5-12 Cam Driven
Roll Feed Mounted on a Press
(For Right-to-Left Feeding)

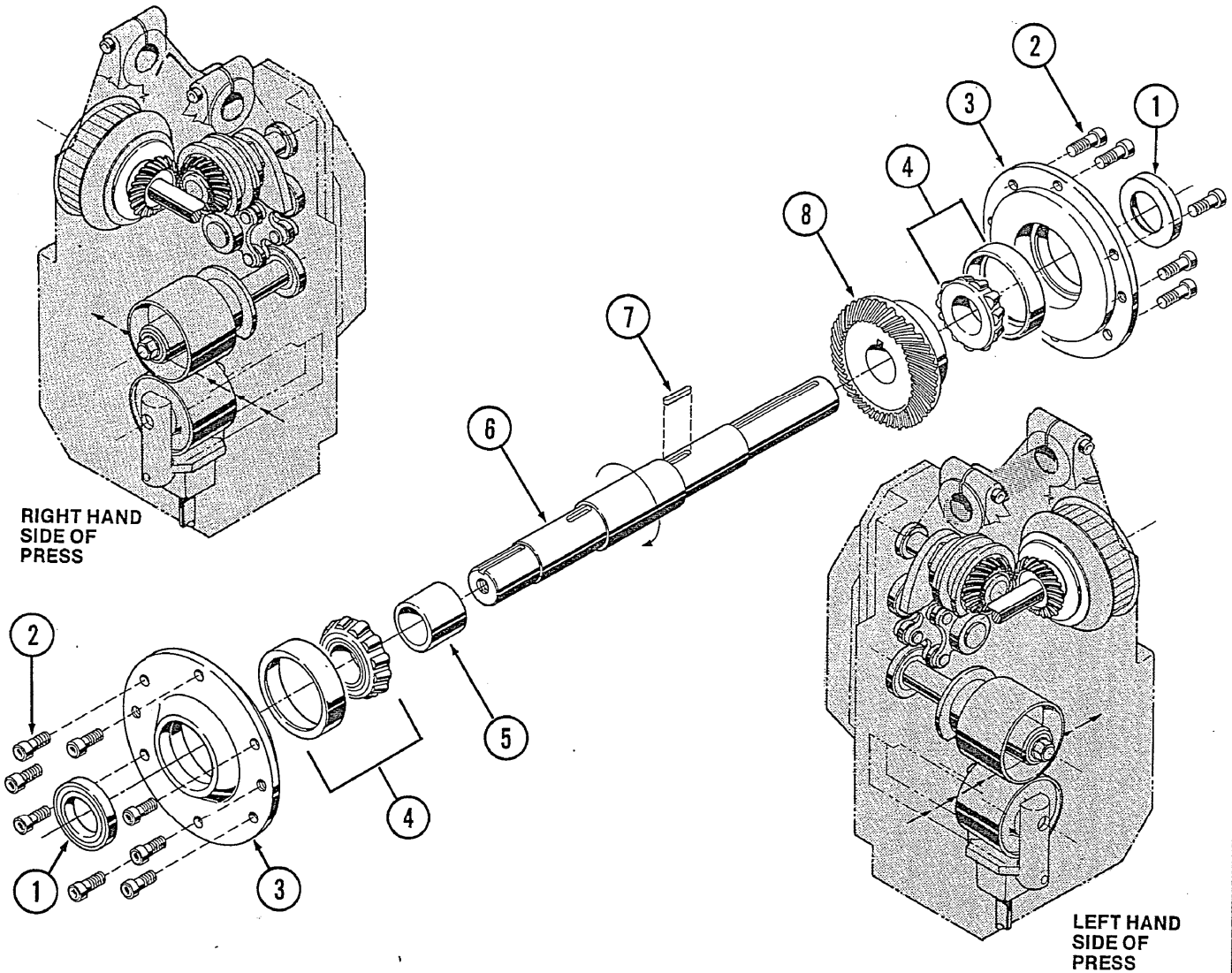
LITTELL INTERNATIONAL, INC.
145 SWIFT ROAD, ADDISON, ILLINOIS 60101-1407, U.S.A.
AREA CODE: (630) 916-6662 LITTELL TELEFAX: (630) 916-6663
SERVICE DEPARTMENT TELEFAX: (630) 916-6664

No. 5-12 Cam Driven Roll Feed: Drive Belt & Pulleys



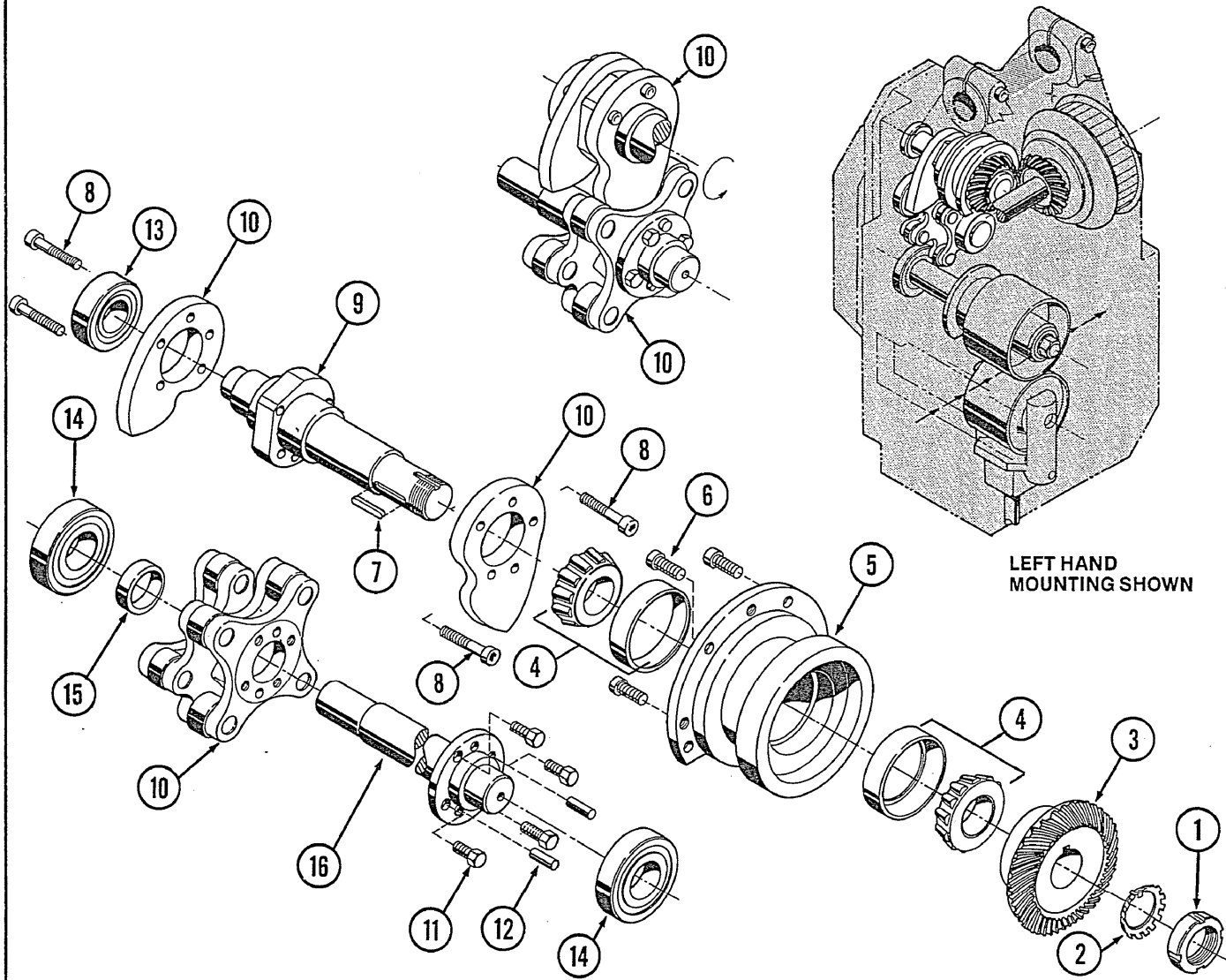
| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|---|-----------|
| 1. | Ring - Retaining ("Waldes" Tru-Arc #5100-200) | 1 |
| 2. | Timing Belt (See Assy Dwg For No.) | 1 |
| 3. | Sprocket ("Mfg Std" #35B36) | 1 |
| 4. | Arm - Idler - Pulley | 1 |
| 5. | Bearing - Ball ("N.D." Z99506) | 4 |
| 6. | Ring - Retaining ("Spirolox" #RRT-244) | 2 |
| 7. | Pulley - Idler (Grooved) | 1 |
| 8. | Ring - Retaining ("Spirolox" #RST-118) | 2 |
| 9. | Pulley - Idler (Crowned) | 1 |
| 10. | Pulley - Driven (Grooved) (See Assy Dwg For No.) | 1 |
| 11. | Bushing - Taperlock (1.375" Bore - .312" x .156" Key) | 1 |
| 12. | Wrench - Offset Socket ("Armstrong" #273H) | 1 |
| 13. | Key - Feathered (.312" x .312" x 3.75" Lg.) | 1 |
| 14. | Screws (Qty. & Size Per Bushing) | 5 |

No. 5-12 Cam Driven Roll Feed: Bevel Gearing - Input Shaft



| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|---|-----------|
| 1. | Seal - Oil (C.R. #14363) | 2 |
| 2. | Screw - ("Nylok" Soc. Hd. Cap - 3/8" - 16 x 1" Lg.) | 16 |
| 3. | Retainer - Bearing | 2 |
| 4. | Bearing - Roller (Timken #26877-26822) | 2 |
| 5. | Spacer | 1 |
| 6. | Shaft - Drive | 1 |
| 7. | Key - Feather (.375" x .375" x 1.62" Lg.) | 1 |
| 8. | Gear - Spiral Bevel (Driver) (Arrow #5P25L25) | 1 |

No. 5-12 Cam Driven Roll Feed: Cam Drive And Follower

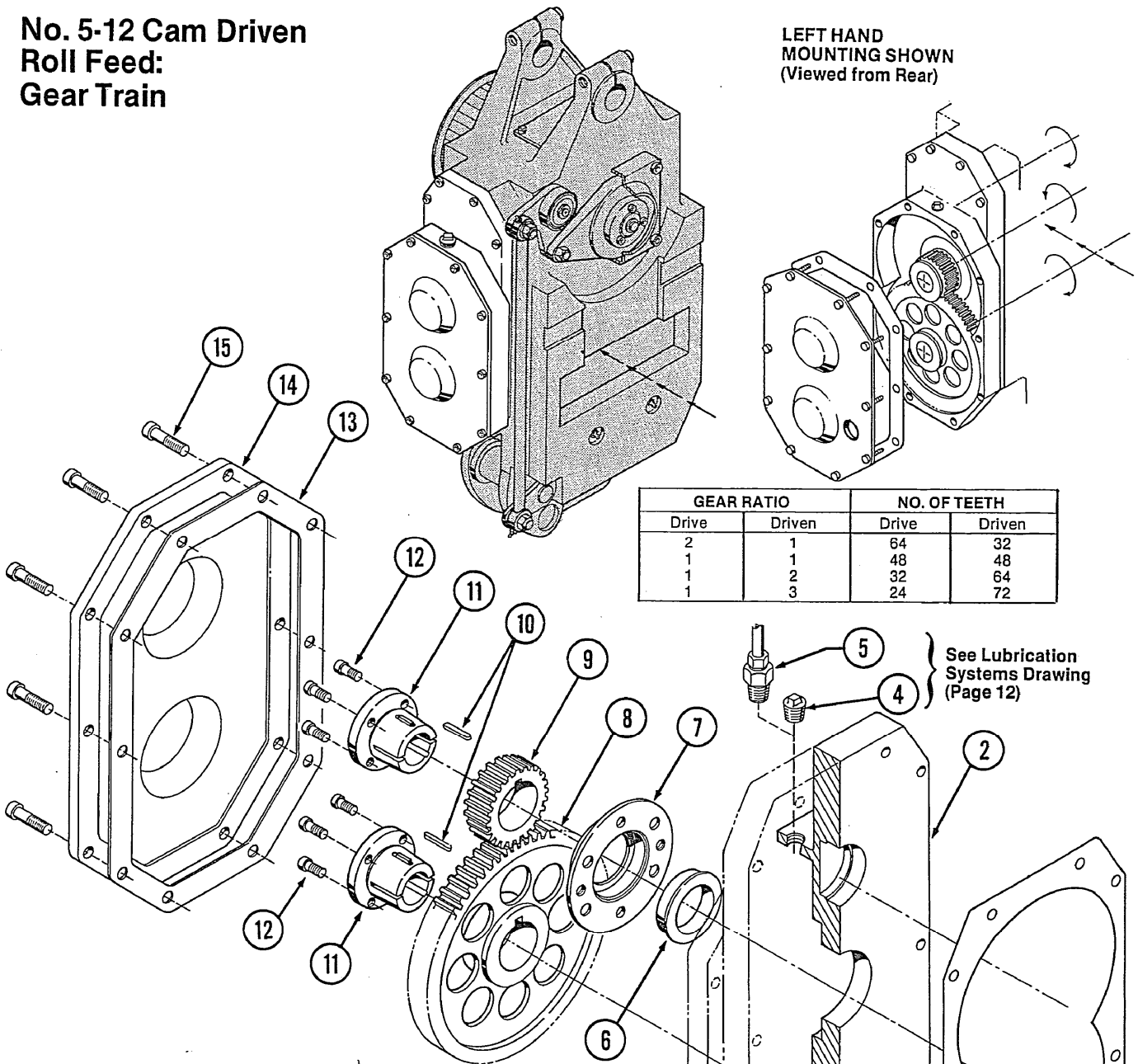


LEFT HAND
MOUNTING SHOWN

| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|--|-----------|
| 1. | Nut - Lock ("Mfg Std" #W07) | 1 |
| 2. | Washer - Lock ("Mfg Std" #N-07) | 1 |
| 3. | Gear - Spiral Bevel (Driven) (Arrow #5P25R25) | 1 |
| 4. | Bearing - Roller (Timken #24780-24720) | 2 |
| 5. | Housing - Bearing | 1 |
| 6. | Screws ("Nylok" Soc. Hd. Cap - 3/8"-16 x 1" Lg.) | 3 |
| 7. | Key - Feather (.375" x .375" x 1.50" Lg.) | 1 |
| 8. | Screws ("Nylok" Soc. Hd. Cap - 3/8"-16 x 1-3/8" Lg.) | 4 |
| 9. | Shaft - Input | 1 |
| 10. | Drive "Commercial Cam" Parallel Index (Model #512-P4H48) (See Sales Order for Feed Cycle) | 1 |
| 11. | Screws - Hex. Hd. (3/8"-24 x 3/4" Lg.) | 4 |
| 12. | Dowel Pin (.4375" Dia.) | 2 |
| 13. | Bearing - Ball (N.D. #3206) | 1 |
| 14. | Bearing - Ball (N.D. #3307) | 2 |
| 15. | Spacer - Bearing | 1 |
| 16. | Shaft - Output | 1 |

No. 5-12 Cam Driven Roll Feed: Gear Train

LEFT HAND
MOUNTING SHOWN
(Viewed from Rear)

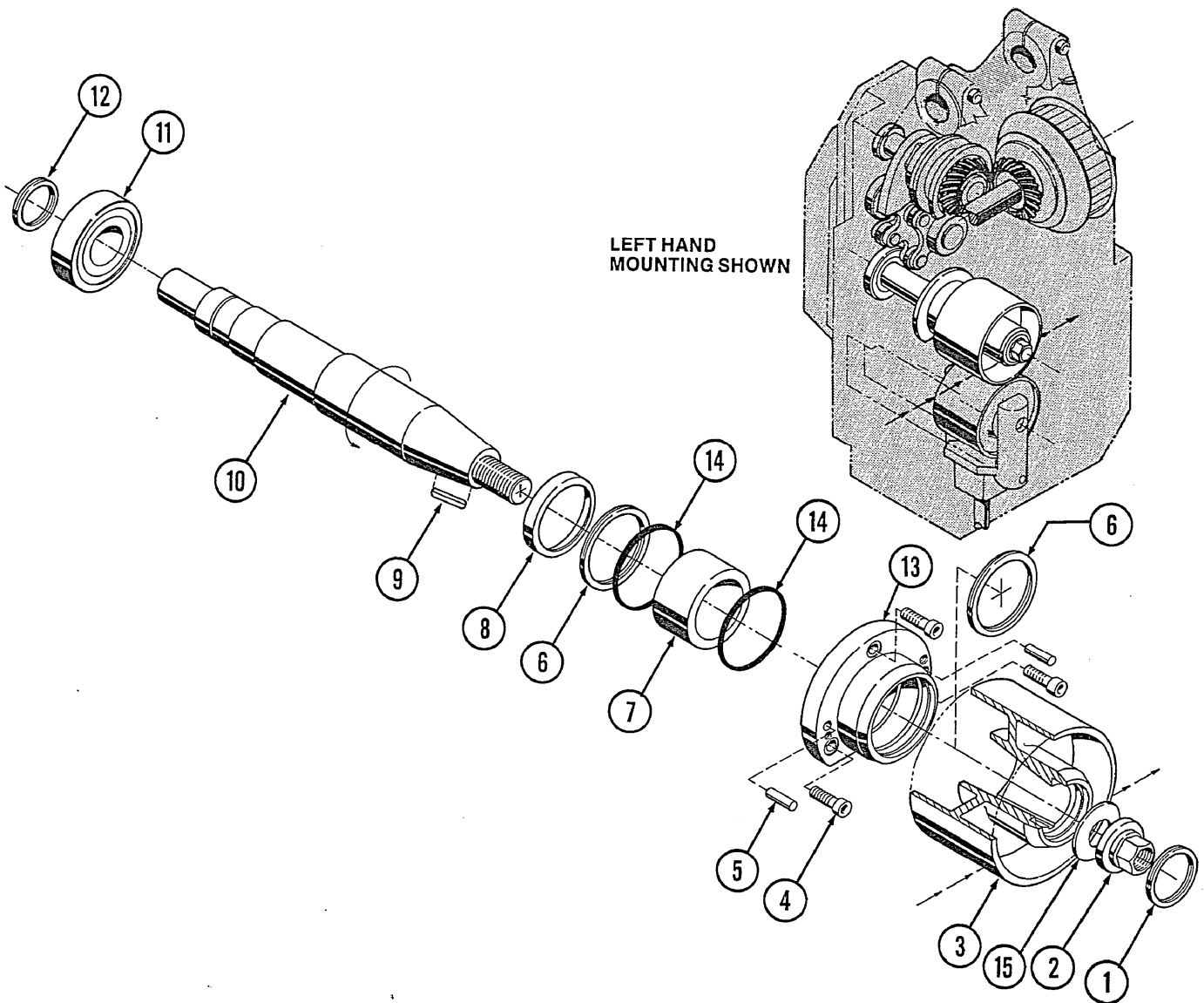


| GEAR RATIO | | NO. OF TEETH | |
|------------|--------|--------------|--------|
| Drive | Driven | Drive | Driven |
| 2 | 1 | 64 | 32 |
| 1 | 1 | 48 | 48 |
| 1 | 2 | 32 | 64 |
| 1 | 3 | 24 | 72 |

| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|---|-----------|
| 1. | Gasket | 1 |
| 2. | Housing - Gear | 1 |
| 3. | Cover-Sump (Not Shown) | |
| 4. | Plug - Pipe (3/8" N.P.T.) | 1 |
| 5. | Fitting - Tube (3/8" N.P.T.) | 1 |
| 6. | Seal - Oil (C.R. #13873) | 1 |
| 7. | Retainer - Oil Seal | 1 |
| 8. | Gear - Spur - See Gear Ratio Chart | 1 |
| 9. | Gear - Spur - See Gear Ratio Chart | 1 |
| 10. | Key - Feather (.25" x .25" x 1.75" Lg.) | 2 |
| 11. | Bushing - Taper (Browning #P1-Type 1) | 2 |
| 12. | Screws - ("Nylok" Soc. Hd. Cap - 5/16"-18 x 1" Lg.) | 6 |
| 13. | Gasket | 1 |
| 14. | Cover - Gear Housing | 1 |
| 15. | Screws - ("Nylok" Soc. Hd. Cap - 5/16"-18 x 1-1/4" Lg.) | 10 |

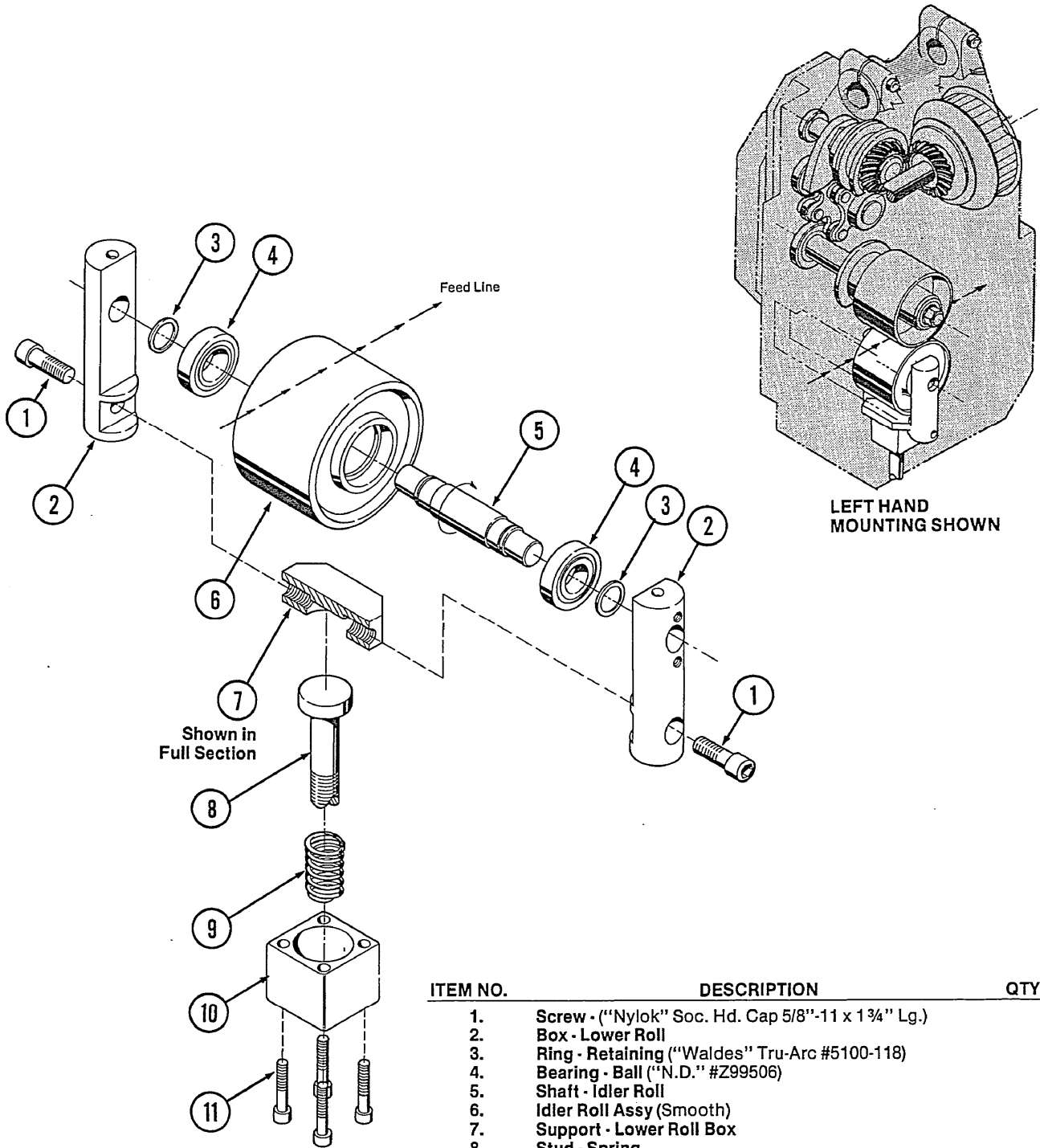
See Lubrication
Systems Drawing
(Page 12)

No. 5-12 Cam Driven Roll Feed: Upper Roll And Drive Shaft



| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|--|-----------|
| 1. | Ring - Retaining (Spirolox #RRT-200) | 1 |
| 2. | Nut - Retaining | 1 |
| 3. | Roll - Drive | 1 |
| 4. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 1-1/4" Lg.) | 3 |
| 5. | Dowel Pin (.312" Dia.) | 2 |
| 6. | Ring - Retaining (Spirolox #RRT-300) | 2 |
| 7. | Bearing - Roller (McGill #MR36SS) | 1 |
| 8. | Seal - Oil (C.R. #22356) | 1 |
| 9. | Key - Feather (Optional) | 1 |
| 10. | Shaft - Upper Roll | 1 |
| 11. | Bearing - Ball (N.D. #3308) | 1 |
| 12. | Ring - Retaining (Spirolox #RST-156) | 1 |
| 13. | Retainer - Bearing | 1 |
| 14. | Ring - "O" (National #623012) | 2 |
| 15. | Washer - Spring - (Schnoor #50-25.4-20) | 1 |

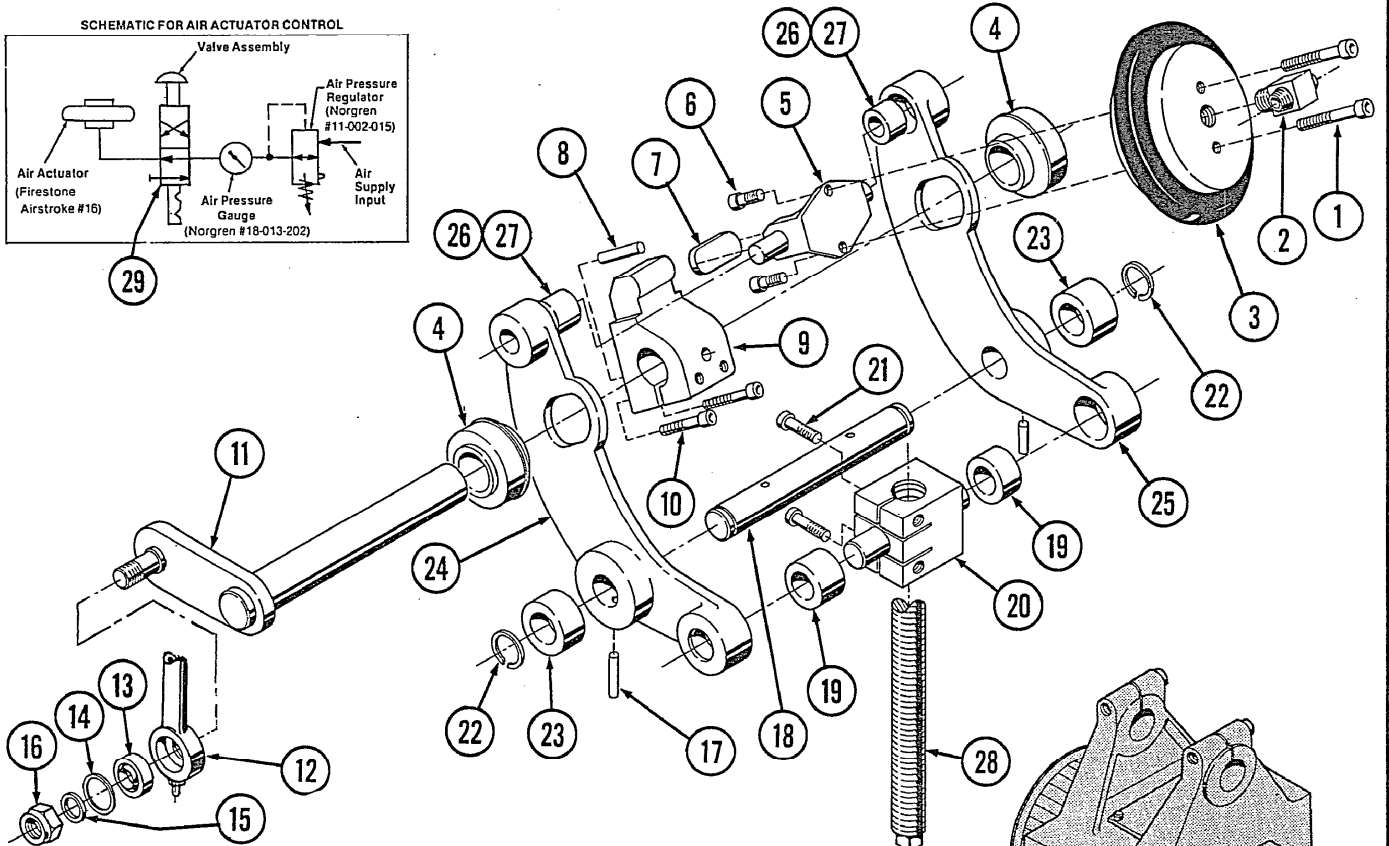
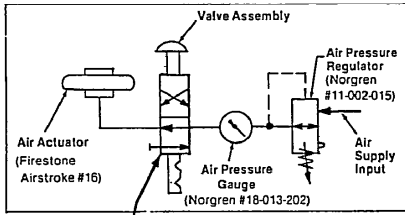
No. 5-12 Cam Driven Roll Feed: Lower Idler Roll & Guides



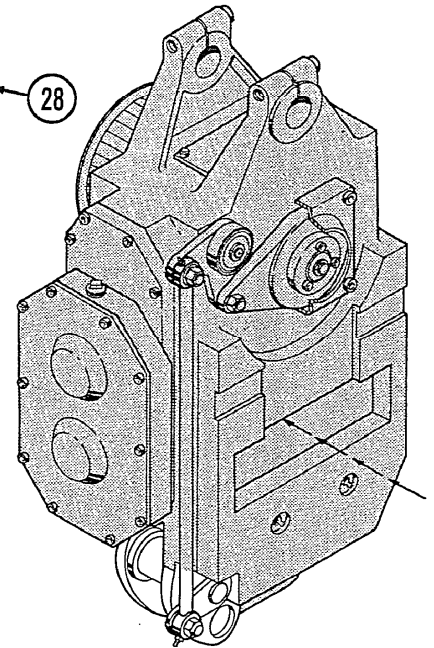
| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|--|-----------|
| 1. | Screw - ("Nylok" Soc. Hd. Cap 5/8"-11 x 1 3/4" Lg.) | 2 |
| 2. | Box - Lower Roll | 2 |
| 3. | Ring - Retaining ("Waldes" Tru-Arc #5100-118) | 2 |
| 4. | Bearing - Ball ("N.D." #Z99506) | 2 |
| 5. | Shaft - Idler Roll | 1 |
| 6. | Idler Roll Assy (Smooth) | 1 |
| 7. | Support - Lower Roll Box | 1 |
| 8. | Stud - Spring | 1 |
| 9. | Spring | 1 |
| 10. | Cap - Spring | 1 |
| 11. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 2 3/4" Lg.) | 4 |

No. 5-12 Cam Driven Roll Feed: Air Spring & Linkage

SCHEMATIC FOR AIR ACTUATOR CONTROL

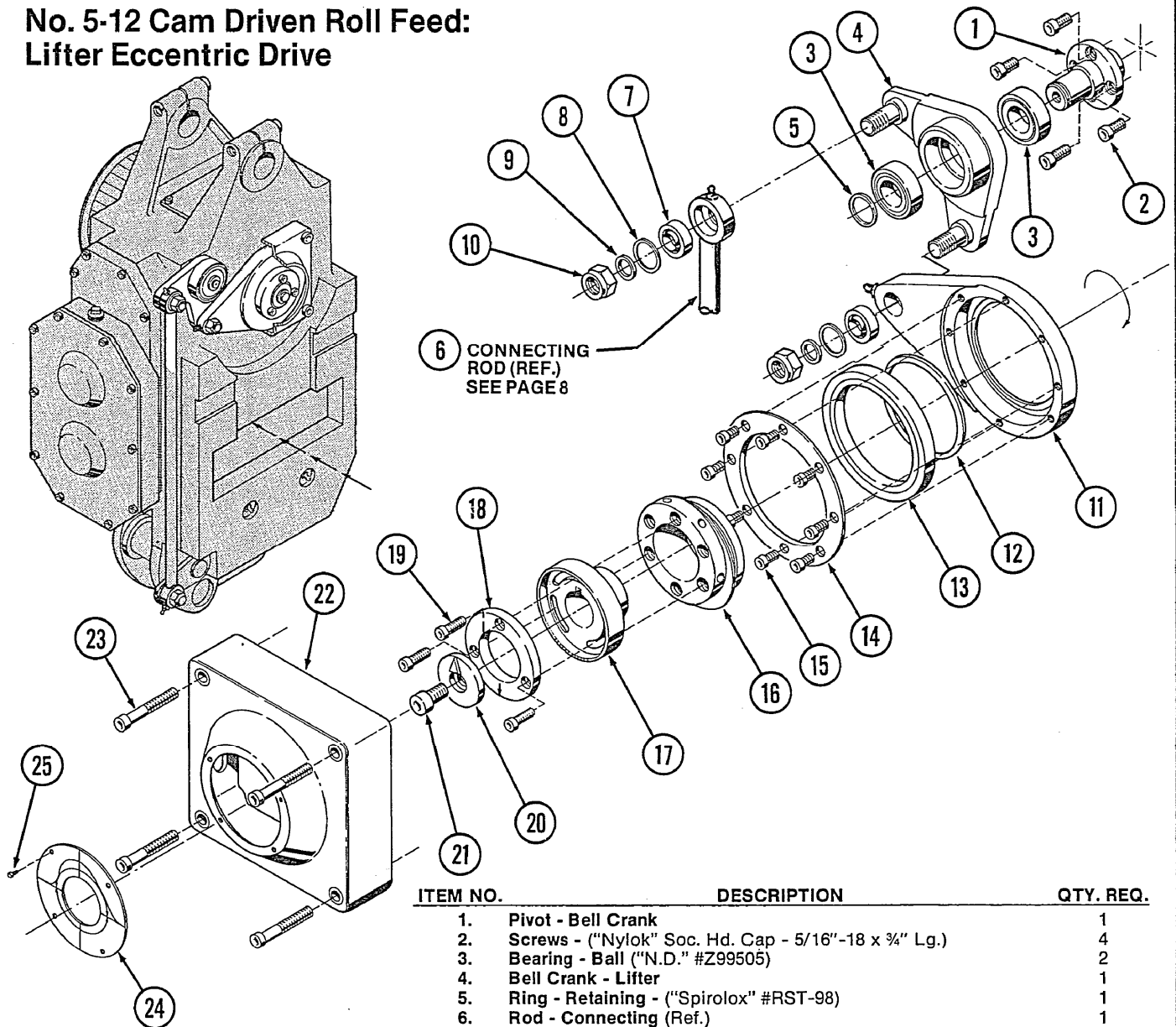


| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|---|-----------|
| 1. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 2" Lg.) | 2 |
| 2. | Tee - Male - ("Parker" Intru-Lok #4-4SB12-B) | 1 |
| 3. | Actuator - ("Firestone" Airstroke #16) | 1 |
| 4. | Bearing - ("Sealmaster" #ER-19) | 2 |
| 5. | Block - Connector | 1 |
| 6. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 3/4" Lg.) | 2 |
| 7. | Button - Lifter | 1 |
| 8. | Pin - Dowel - (.375" Dia.) | 1 |
| 9. | Arm - Lifter | 1 |
| 10. | Screws ("Nylok" Soc. Hd. Cap 3/8"-16 x 1 1/2" Lg.) | 2 |
| 11. | Crank - Lifter - Arm | 1 |
| 12. | Rod - Connecting | 1 |
| 13. | Bearing - ("Morse" #SBG-10SA) | 1 |
| 14. | Ring - Retaining ("Walves" Tru-Arc #N5000-118) | 1 |
| 15. | Spacer | 1 |
| 16. | Nut - (3/8"-11 Thd.) | 1 |
| 17. | Pin - (.250 Dia.) | 2 |
| 18. | Shaft - Lever | 1 |
| 19. | Bearing - Needle - ("RBC" #SJ-7174-SS) (Without Inner Race) | 2 |
| 20. | Block - Pivot | 1 |
| 21. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 1 1/4" Lg.) | 2 |
| 22. | Ring - Retaining - ("Walves" Tru-Arc #5100-100) | 2 |
| 23. | Bearing - Needle - ("RBC" #SJ-7134-SS) (Without Inner Race) | 2 |
| 24. | Level - Lifter - R.H. | 1 |
| 25. | Lever - Lifter - L.H. | 1 |
| 26. | Bearing - Roller - ("RBC" #SJ-7145-SS) (Without Inner Race) | 2 |
| 27. | Bearing - Roller - Inner Race ("RBC" #IR-7235) | 2 |
| 28. | Spring - Stud | 1 |
| 29. | Valve - Air | 1 |



LEFT HAND MOUNTING SHOWN

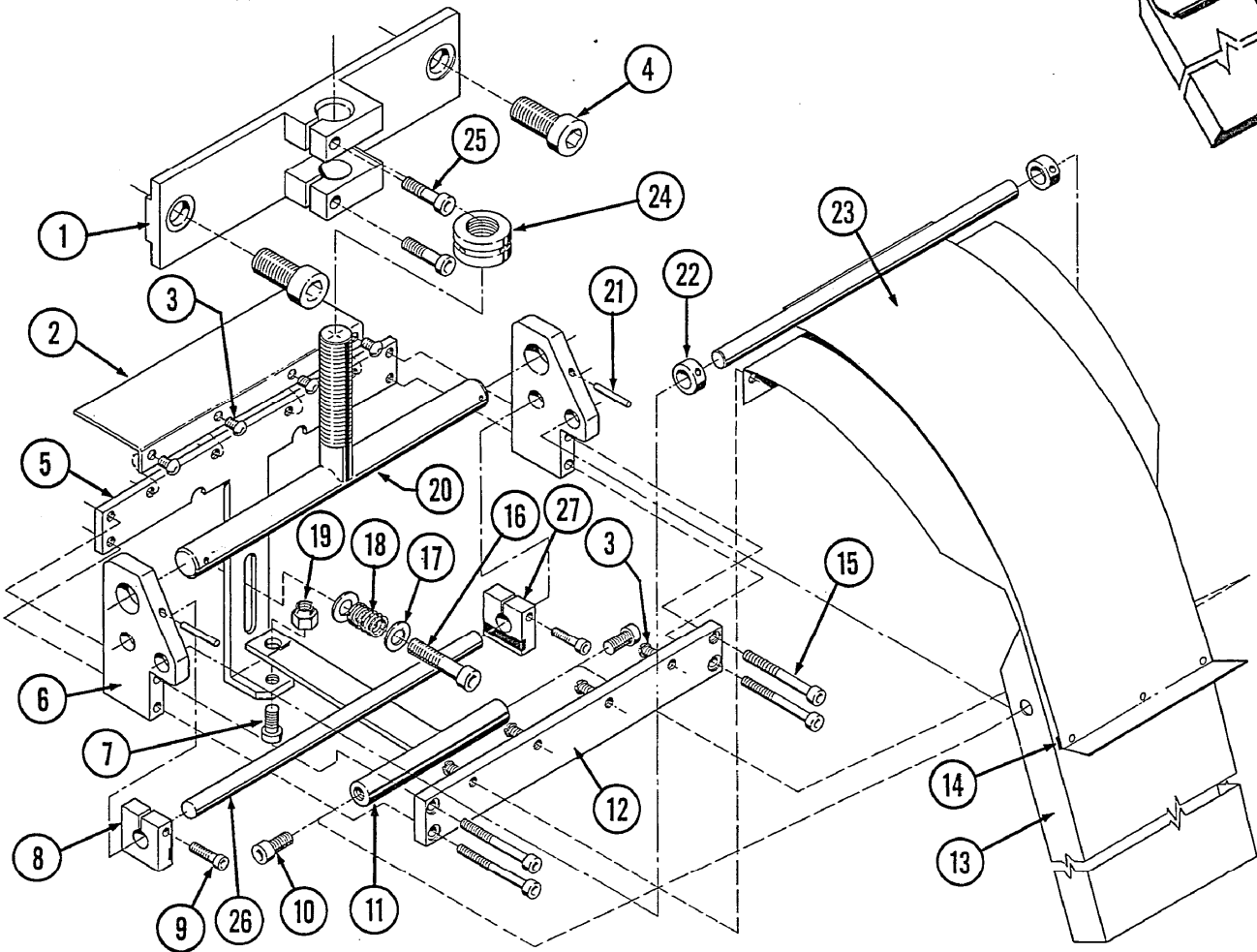
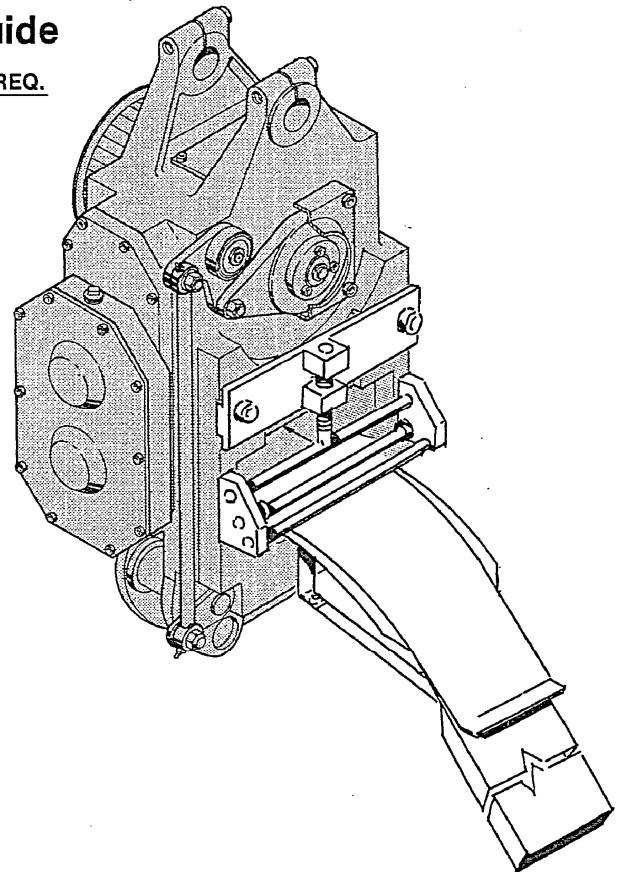
No. 5-12 Cam Driven Roll Feed: Lifter Eccentric Drive



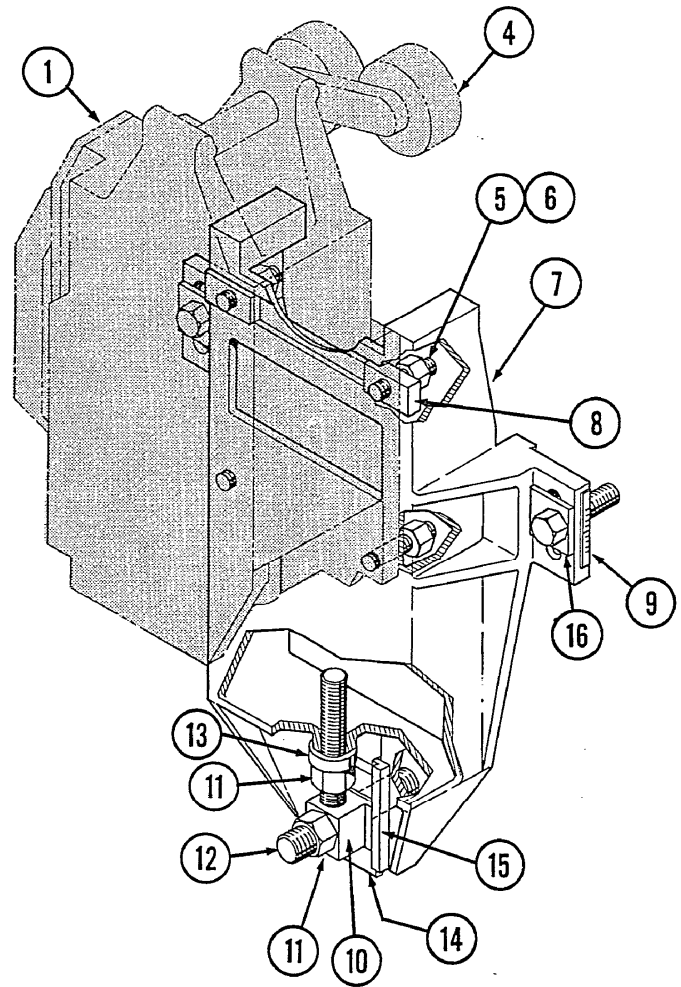
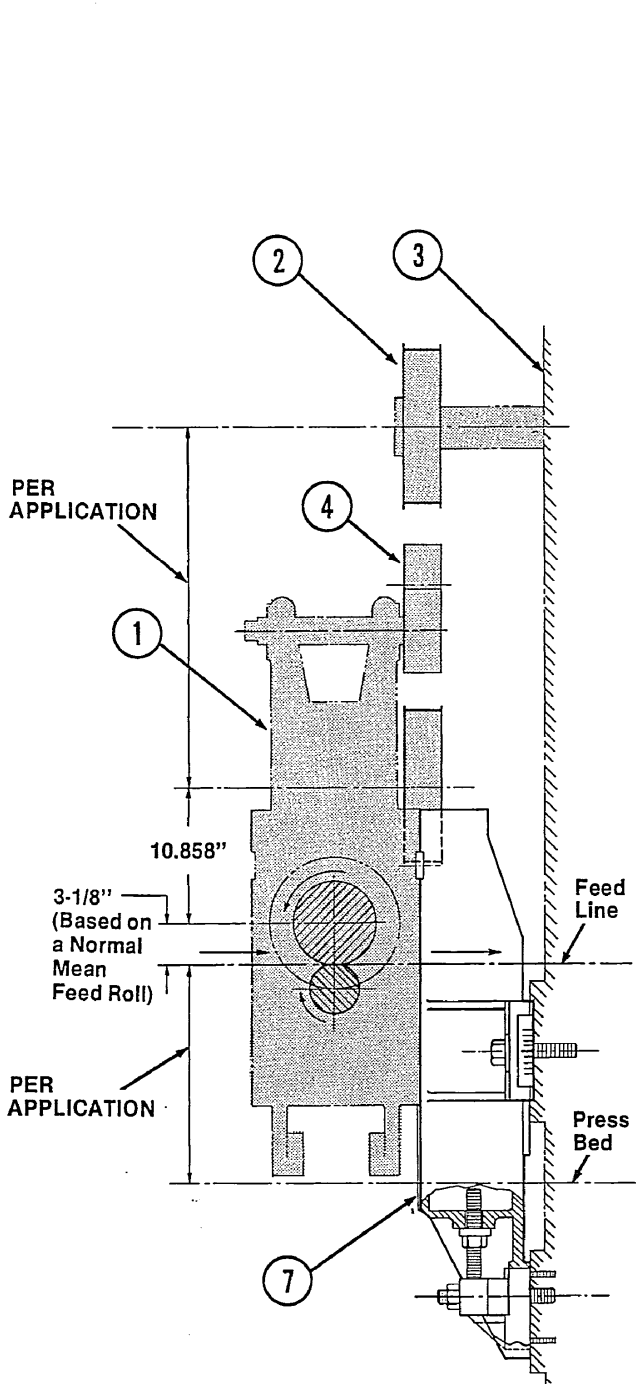
| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|---|-----------|
| 1. | Pivot - Bell Crank | 1 |
| 2. | Screws - ("Nylok" Soc. Hd. Cap - 5/16"-18 x 3/4" Lg.) | 4 |
| 3. | Bearing - Ball ("N.D." #Z99505) | 2 |
| 4. | Bell Crank - Lifter | 1 |
| 5. | Ring - Retaining - ("Spirolox" #RST-98) | 1 |
| 6. | Rod - Connecting (Ref.) | 1 |
| 7. | Bearing - ("Morse" #SBG-10SA) | 2 |
| 8. | Ring - Retaining - ("Waldes" Tru-Arc #N5000-118) | 2 |
| 9. | Spacer | 2 |
| 10. | Nut - (5/8"-11 Thd.) | 2 |
| 11. | Housing - Bearing - Lifter | 1 |
| 12. | Ring - Retaining - ("Spirolox" #RS-400) | 1 |
| 13. | Bearing - ("Kaydon" #KD40CP) | 1 |
| 14. | Plate - Cover | 1 |
| 15. | Screws - ("Nylok" Soc. Hd. Cap 1/4"-20 x 5/8" Lg.) | 8 |
| 16. | Lifter - Eccentric | 1 |
| 17. | Bushing - Taper Lock | 1 |
| 18. | Ring - Retainer | 1 |
| 19. | Screws - ("Nylok" Soc. Hd. Cap 3/8"-16 x 3/4" Lg.) | 3 |
| 20. | Retainer - Bushing | 1 |
| 21. | Screw - ("Nylok" Soc. Hd. Cap - 1/2"-13 x 1" Lg.) | 1 |
| 22. | Guard - Eccentric | 1 |
| 23. | Screws - ("Nylok" Soc. Hd. Cap - 1/2"-13 x 3" Lg.) | 4 |
| 24. | Dial - Feed | 1 |
| 25. | Screws - (Soc. Hd. Cap #6-32 x 3/16" Lg.) | 4 |

No. 5-12 Cam Driven Roll Feed: Stock Guide

| ITEM NO. | DESCRIPTION | QTY. REQ. |
|----------|--|-----------|
| 1. | Bracket - Adjustment | 1 |
| 2. | Support - Stock | 1 |
| 3. | Screws - ("Nylok" Button Hd. - 3/8"-16 x 5/8" Lg.) | 8 |
| 4. | Screws - ("Nylok" Soc. Hd. Cap - 1"-8 x 2") | 2 |
| 5. | Bracket - Mounting | 1 |
| 6. | Bracket - Upper Guide Holder | 2 |
| 7. | Screw - ("Nylok" Soc. Hd. Cap - 1/2"-13 x 1 1/2" Lg.) | 1 |
| 8. | Guide - Upper - Rear | 1 |
| 9. | Screws - ("Nylok" Soc. Hd. Cap - 3/8"-16 x 1 3/4" Lg.) | 2 |
| 10. | Screws - ("Nylok" Soc. Hd. Cap - 1/2"-13 x 3/4" Lg.) | 2 |
| 11. | Bar - Support | 1 |
| 12. | Bar - Catenary Mounting | 1 |
| 13. | Catenary - Stock Guide | 1 |
| 14. | Slide - Nylon (#10-32 x 1/4" Flat Hd. - 3 Qty.) | 1 |
| 15. | Screws - ("Nylok" Soc. Hd. Cap - 3/8"-16 x 3 1/2" Lg.) | 4 |
| 16. | Screw - ("Nylok" Hex. Hd. 1/2"-13 x 3") | 1 |
| 17. | Washer - (Steel - 1/2" x 1 1/4" O.D. x 1/8" Thk.) | 2 |
| 18. | Spring - (Danly #9-1608-11) | 1 |
| 19. | Nut - (1/2"-13 Th'd.) | 1 |
| 20. | Hanger - Adjustment | 1 |
| 21. | Roll Pin (.312" Dia. x 2") | 2 |
| 22. | Collar - Steel (Hallowell .750 I.D. x 1.25 O.D.) | 2 |
| 23. | Deflector - Stock Guide | 1 |
| 24. | Nut - Adjusting | 1 |
| 25. | Screws - ("Nylok" Soc. Hd. Cap - 1/2"-13 x 1 3/4" Lg.) | 2 |
| 26. | Shaft - Guide | 1 |
| 27. | Guide - Upper - Front | 1 |



No. 5-12 Cam Driven Roll Feed: Press Adaptor Plate

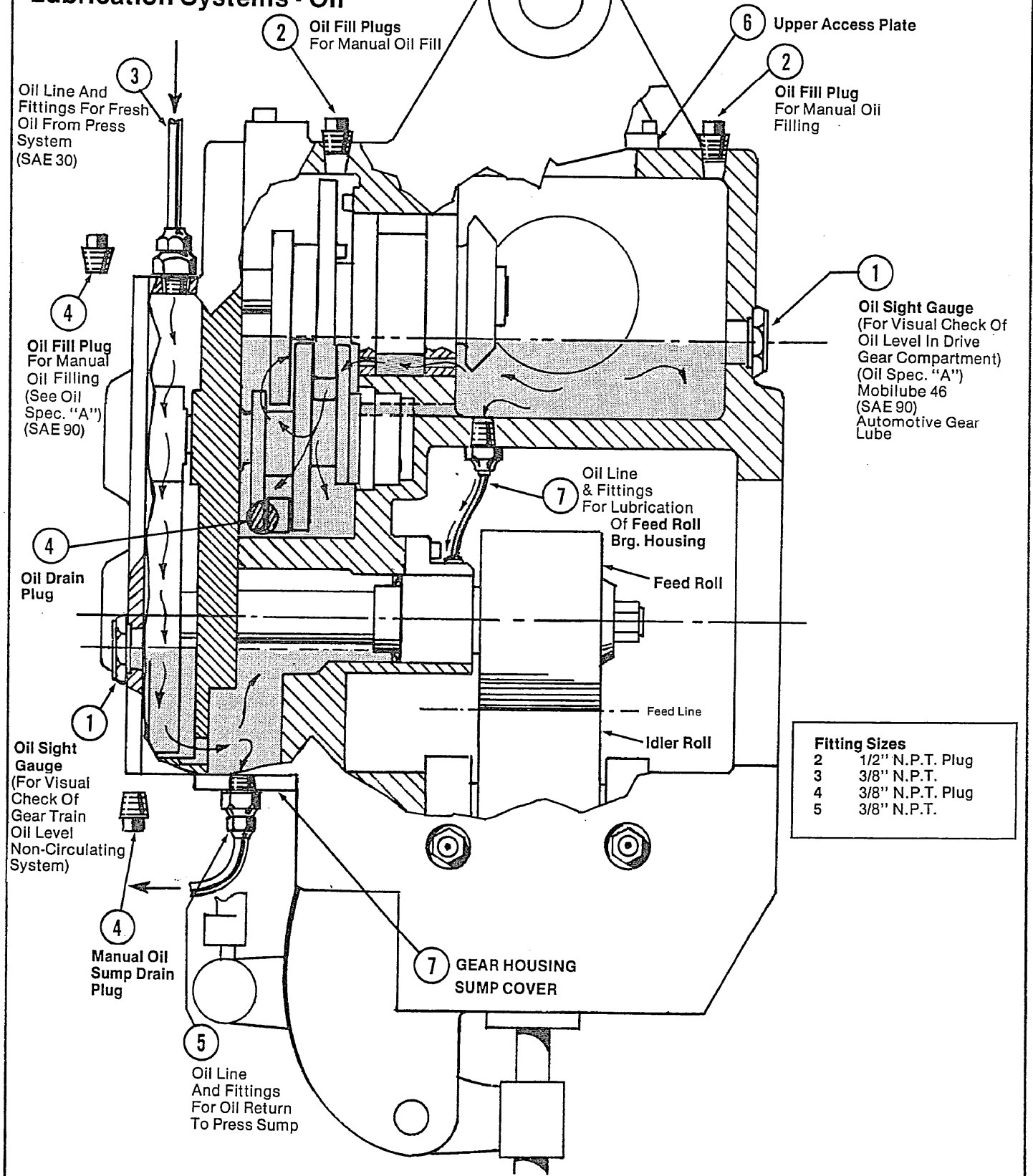


| ITEM NO. | DESCRIPTION | NO. REQ. |
|----------|---------------------------------|----------|
| 1. | Cam Feed | 1 |
| 2. | Drive Pulley | 1 |
| 3. | Press | 1 |
| 4. | Timing Belt Take-Up | 1 |
| 5. | Stud - Feed Bracket | 4 |
| 6. | Nut - (1"-8Th'd.) | 4 |
| 7. | Plate - Adaptor | 1 |
| 8. | Key - Main Bracket | 2 |
| 9. | Scale - Bracket Adj. | 1 |
| 10. | Screw - Jack | 1 |
| 11. | Nut (1"-8 Th'd. 1 1/4"-7 Th'd.) | 2(*) |
| 12. | Stud - Jack Screw | 1 |
| 13. | Bearing - Thrust | 1 |
| 14. | Bracket - Jack Screw | 1 |
| 15. | Clamp - Jack Screw | 1 |
| 16. | Washer - Rect. | 1 |

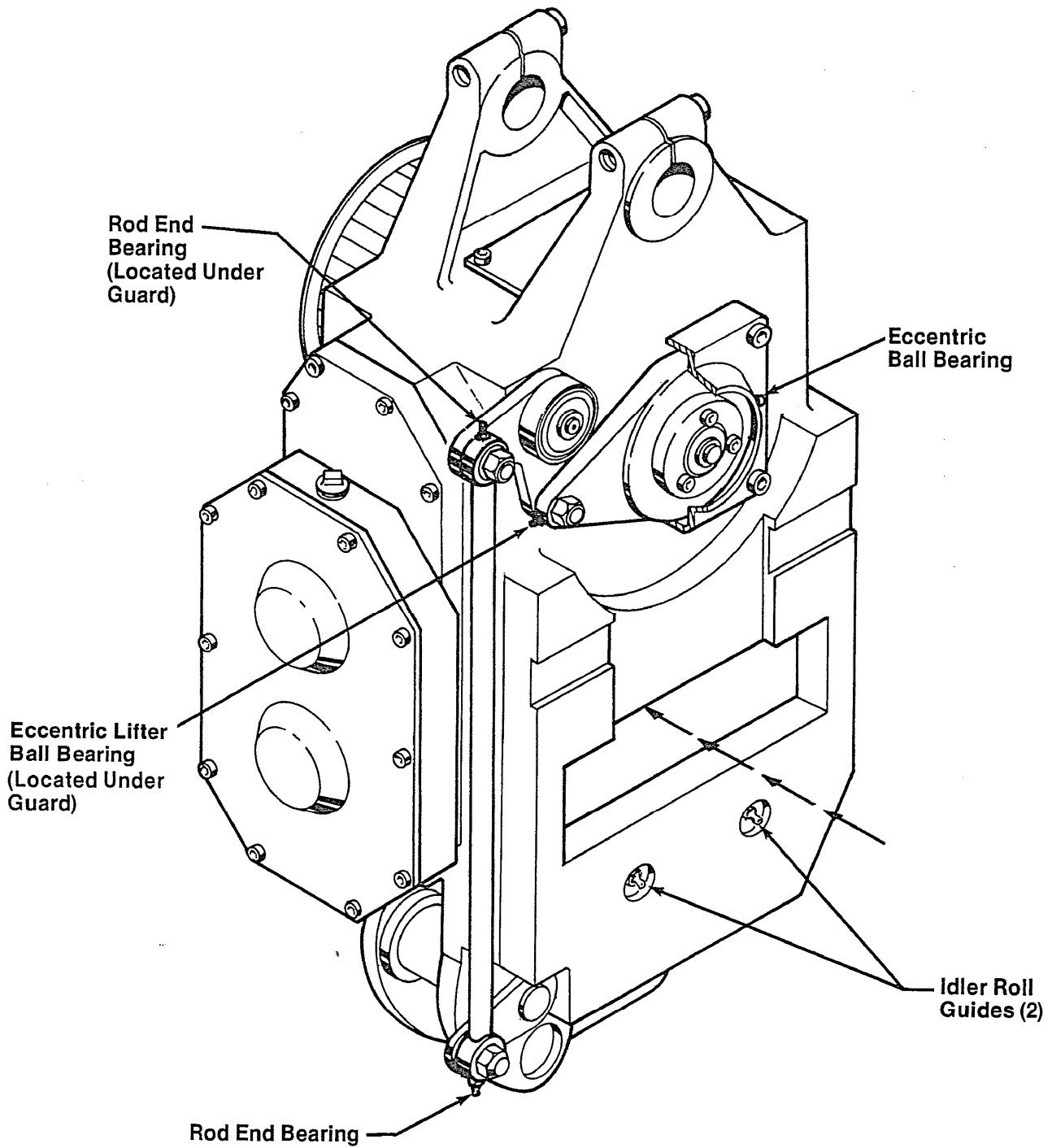
Note (*)

Nut Size Varies With Individual Press Padding.

No. 5-12 Cam Driven Roll Feed: Lubrication Systems - Oil



**No. 5-12 Cam Driven Roll Feed
Lubrication Systems - Grease Fitting Locations**



**NOTE: N.L.G.I. #2 Grease At Six (6) Gun Fittings
Listed Above Every 48 Hours of Machine Operation.**

No. 5-12 Cam Driven Roll Feed: Safety Guards

