



Eaton Fuller FO-16D313E-LEP Transmission Parts Manual

This is Eaton Fuller FO-16D313E-LEP Transmission parts manual brought to you by Pro Gear and Transmission to assist you identifying the parts for your Eaton / Fuller transmission unit.

If you need any assistance identifying the correct Eaton / Fuller unit for your truck and equipment, contact your Eaton replacement parts specialists at Pro Gear and Transmission.

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Illustrated Parts List

FO-16D313E-LEP
July 2011

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How To Use The Illustrated Parts List

The information contained in this document is subject to frequent updates. Therefore, for the latest information available, please visit the interactive Electronic Parts Catalog at www.roadranger.com/epc.

Model Designation or Nomenclature

- For information regarding Model Designation and Nomenclature, visit www.roadranger.com.

Kits and Assemblies (K/A's)

- Kits and Assemblies contain groups of individual or assembled parts developed for optimal replacement or repair of a service problem.
- Kits and Assemblies are shown with applicable parts groupings in the parts listings.

Identifying Kits and Assemblies

A- Part numbers beginning with the letter 'A' are pre-assembled Production Assemblies

K- Part numbers beginning with the letter 'K' are kits that are not assembled

S- Part numbers beginning with the letter 'S' are pre-assembled Service Assemblies

- Note: Some Production Assemblies do not begin with a letter prefix (Midrange only).

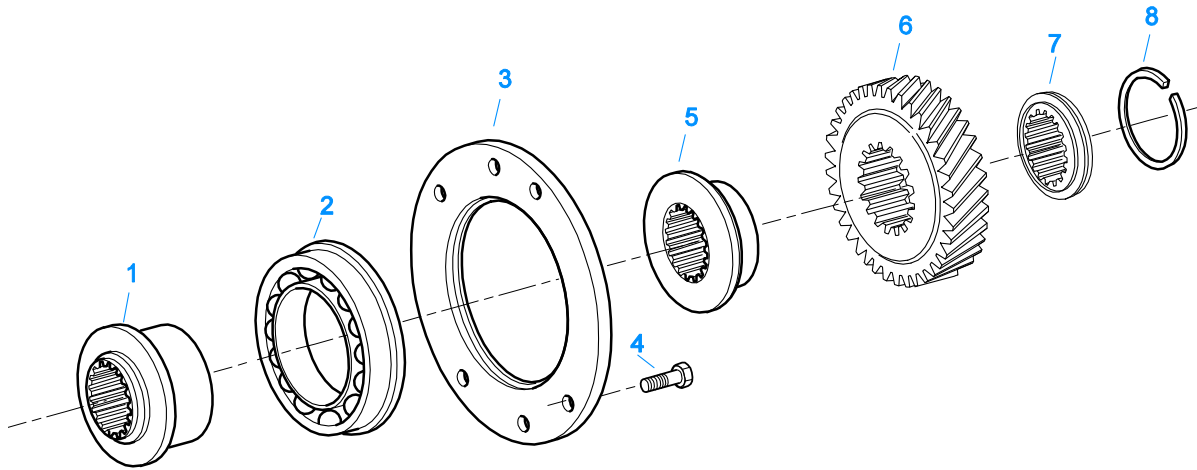
Illustrations

- Illustrations show parts in assembly groups.
- Item numbers on illustrations correspond with parts listings on pages adjacent to the illustration.
- Notes are included on illustrations where additional information is needed.

Parts Listing

Parts listings are defined by parts groupings and are broken down by service assemblies. Parts listings identify a part for servicing with the following categories

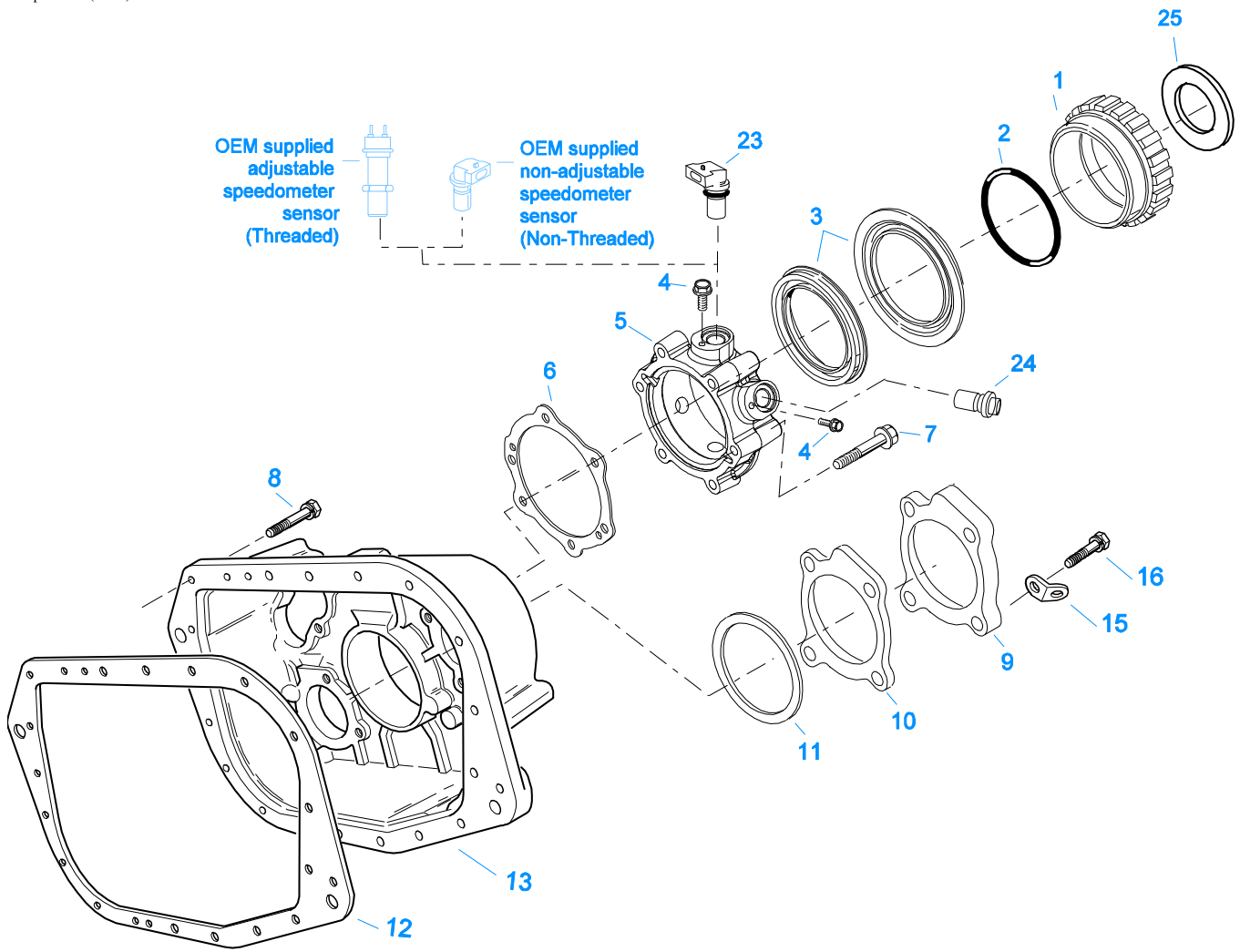
- **Item Number** - corresponding with numbers on illustrations for part identification.
- **Current Part** - identifies part as it is available for service.
- **Description** - specifies part name or description.
- **Replaced Part** - quantity quantity required for assembly.
- **Quantity** - defines unique characteristics or requirements.
- **Notes** - indicates Kits or Assemblies that contain a particular part.
- **Kits/Assy's Where Used**



10484-6-93

AUXILIARY DRIVE GEAR

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|----------------------|---------------|------|----------------|-------------------------|
| 1 | 4304499 | SPACER | | 1 | | |
| 2 | 5566510-BOX | BEARING | 5566510 | 1 | | K-3512,K-3513 |
| 3 | 4304497 | RETAINER | | 1 | | |
| 4 | X-8-680 | CAPSCREW | | 6 | 3/8"-16X1-1/2" | |
| 5 | 4304500 | SPACER | | 1 | | |
| 6 | 4303825 | AUXILIARY DRIVE GEAR | | 1 | | |
| 7 | 4303185 | WASHER | 4300901 | 1 | | |
| 8 | 4301254 | SNAP RING | | 1 | | K-3512,K-3513 |

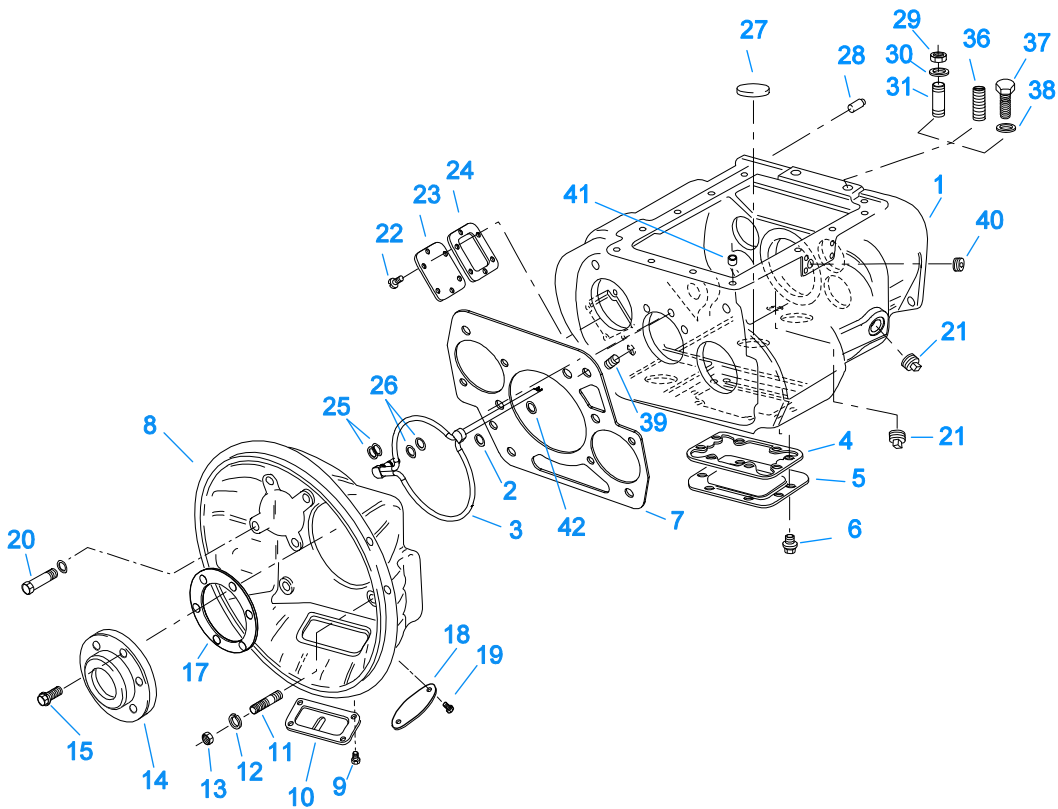


11406-08-01

CASE (AUX)

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-------------|---------------|------|-------|-------------------------|
|------|--------------|-------------|---------------|------|-------|-------------------------|

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-----------------------------|--------------------------|------|--|-------------------------|
| 1 | S-2501 | SPEEDO ROTOR ASSY | 4302242 | 1 | MAGNETIC | |
| 2 | 5568511 | -O- RING | | 1 | | K-2918,S-2501,S-2913 |
| 3 | K-2918 | OIL SEAL KIT | 4302322 4302323 | 1 | "FOR MAGNETIC COVER" | K-3512,K-3513 |
| 4 | X-8-0801M | CAPSCREW | | 3 | M8 X 1.25 X 12MM | |
| 5 | S-2913 | REAR BEARING COVER ASSY | 691637 ,4304651 ,4305833 | 1 | | |
| 6 | 1009551 | GASKET - RED EDGE MOLDED | | 1 | RED EDGE MOLDED GASKET - UNCOMPRESSED THICKNESS .043 - .051 - NOT INTERCHANGEABLE WITH ANY OTHER GASKET | K-2918,K-3509,S-2913 |
| 6 | 4302247 | GASKET - PURPLE EDGE MOLDED | | 1 | NON EDGE MOLDED GASKET - UNCOMPRESSED THICKNESS - .013 - .018 - NOT INTERCHANGABLE WITH ANY OTHER GASKET | K-2918,K-3509 |
| 7 | X-8L-611 | CAPSCREW | | 4 | 3/8"-16X3-1/4" | |
| 7 | X-8L-614 | CAPSCREW | | 2 | 3/8"-16X2" | |
| 8 | X-8L-602 | CAPSCREW | | 17 | 3/8"-16X1-1/2" | |
| 8 | X-8L-614 | CAPSCREW | | 2 | 3/8"-16X2" | |
| 9 | 4302320 | COVER | 21346 | 2 | | |
| 10 | 4305978 | GASKET | 4302246 | 2 | | K-3509 |
| 11 | K-2805 | SHIM KIT | 21452 K - 2106 | 1 | | K-3512,K-3513 |
| 12 | 14335 | GASKET | | 1 | | K-3509 |
| 13 | 4303586 | REAR HOUSING | | 1 | | |
| 15 | 20815 | LIFTING EYE | 17105 | 2 | | |
| 16 | X-8L-604 | CAPSCREW | | 8 | 3/8"-16X1-1/4" | |
| 23 | K-3231 | SPEED SENSOR KIT | A - 6398 ,A - 6724 | 1 | SINGLE PICK-UP (2 PIN) | |
| 24 | K-3523 | SPEEDO PLUG KIT | 4302707 | 2 | | |
| 25 | 4304653 | SHIELD | | 1 | | S-2913 |



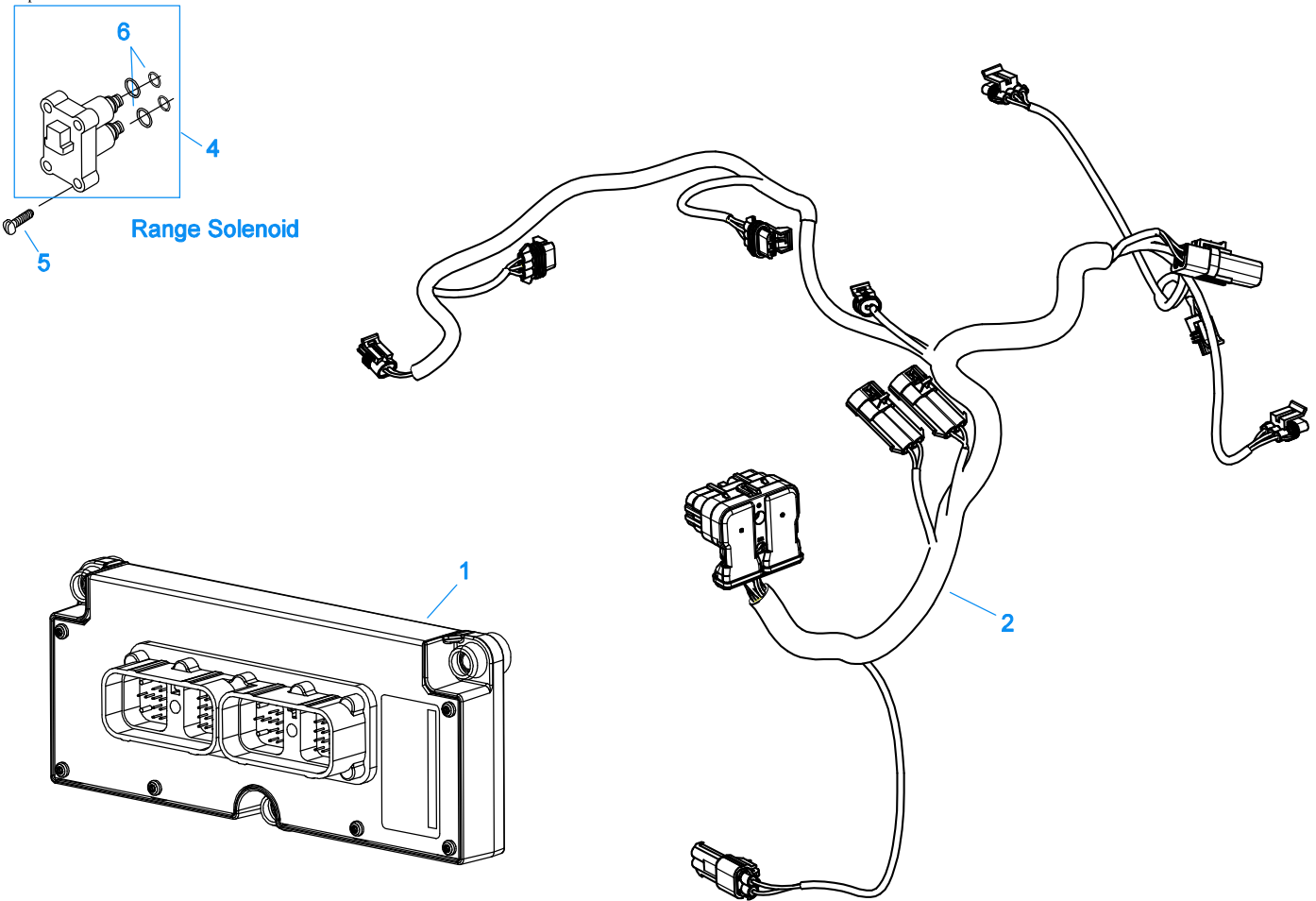
10305E-08-04

CASE (FRONT)

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------------------|------------------------------|------|---|-------------------------|
| 1 | S-3015 | CASE ASSEMBLY | 4305866 | 1 | | |
| 2 | 5568544 | -O- RING | | 1 | | |
| 3 | A-7471 | EXTENDED LUBE TUBE ASSY | 4305393 | 1 | | |
| 4 | 4305310 | GASKET | 4302810 | 1 | | K-3509,K-3637,K-3644 |
| 5 | 4302809 | PTO COVER | 16596 ,4300571 | 1 | | |
| 6 | X-8-725 | CAPSCREW | X 8 724 | 8 | 7/16"-14X7/8" | |
| 7 | 4306584 | CLUTCH HOUSING GASKET | 4304815,4305668 | 1 | | K-3509,K-3760 |
| 8 | K-3760 | FORCED LUBE CL HSG KIT | 4304328, 4305819, 4305751 | 1 | #1 PULL ALUMINUM | |
| 9 | X-8-1200M | CAPSCREW | | 4 | M12 X 1.75 X 20MM | |
| 10 | K-3643 | CLUTCH HOUSING COVER KIT | 691954 | 1 | | |
| 11 | 4306583 | STUD | 5966 | 6 | | |
| 12 | X-10-1005 | WASHER | X 3 1000 ,X10 1000 ,X10 1004 | 6 | 1.23 X 6.60 | |
| 13 | X-1-1012 | HEX NUT | X-1-1005 | 6 | .625-18 | |
| 14 | 20550 | FRONT BRG COVER | | 1 | 2" PULL | |
| 15 | X-8L-604 | CAPSCREW | | 6 | 3/8"-16X1-1/4" | |
| 17 | 14311 | GASKET | | 1 | | K-3509 |
| 18 | 4303692 | HAND HOLE COVER | | 1 | SEE PART MARKING ON COMPONENT PRIOR TO ORDERING TO ENSURE THAT THE PROPER SIZE HAND HOLE CAVER IS ORDERED | K-3760 |
| 18 | 4305365 | HAND HOLE COVER | | 1 | SEE PART MARKING ON COMPONENT PRIOR TO ORDERING TO ENSURE THAT THE PROPER SIZE HAND HOLE CAVER IS ORDERED | |

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-------------------------------|---------------------------------|------|--------------------------------------|---------------------------------|
| 19 | X-8-423 | CAPSCREW | | 2 | 1/4"-20X1/2" | K-3760 |
| 20 | X-8C-830 | HEX HEAD SCREW/WASHER ASSY | X-8C-826 | 6 | .500-13 X 1.490 | K-3760 |
| 21 | 4304023 | PLUG | 4303747 | 2 | 1-1/16" MAGNETIC, O-RING INCLUDED | |
| 22 | X-8-686 | CAPSCREW | | 6 | 3/8"-16X3/4" | |
| 23 | 14575 | PTO COVER | 4302254 | 1 | | |
| 24 | 4305309 | GASKET | 1684 | 1 | | K-3509,K-3637,K- 3644,K-3739 |
| 25 | 13835 | -O- RING | | 2 | | |
| 26 | 13653 | -O- RING | | 2 | | K-2908,K-3510 |
| 27 | 14373 | MAGNET | | 3 | | S-3015 |
| 28 | 18128 | PIN | | 2 | | |
| 29 | X-1-1012 | HEX NUT | | 2 | .625-18 | |
| 30 | X-10-1005 | WASHER | X 3 1000 ,X10 1000 ,X10 1004 | 2 | 1.23 X 6.60 | |
| 31 | 14554 | STUD | 1632 ,6579 | 2 | 5/8" X 2-3/16" | |
| 36 | 23104 | PLUG | 1712 | 2 | | |
| 37 | X-8-1005 | CAPSCREW | | 2 | 5/8"-11X1-1/4" | |
| 38 | 20814 | SPACER | | 2 | | |
| 39 | X-12-802 | PIPE PLUG | X12 800 | 1 | 1/2" | |
| 40 | X-12-1212 | PIPE PLUG | | 1 | | |
| 41 | 691447 | PIN | | 1 | | S-3015 |
| 42 | 13834 | -O- RING | | 1 | | |

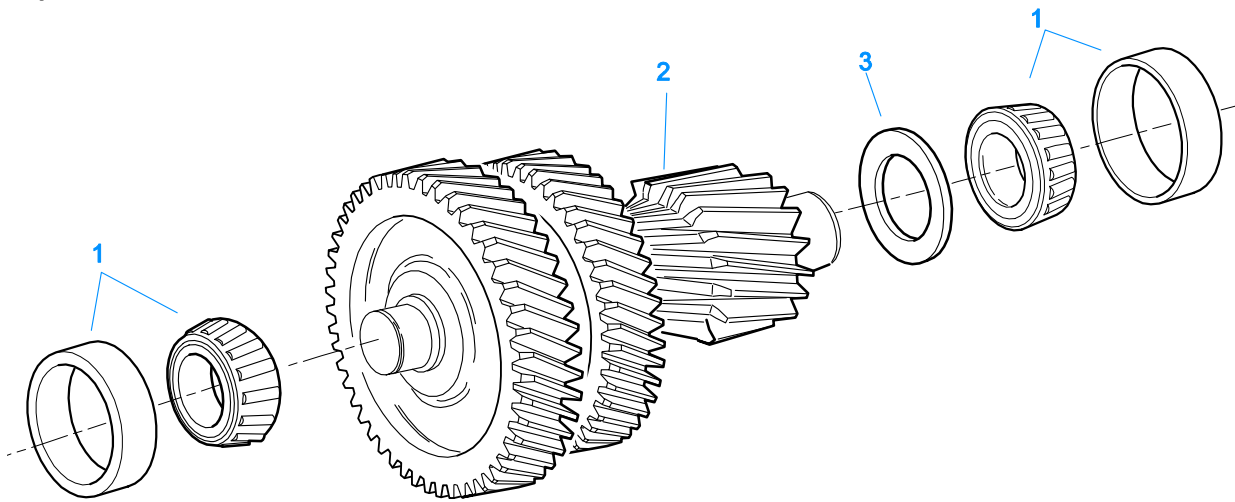
Group: CONTROLLER ECU & HARNESS



20322-10-05

CONTROLLER ECU & HARNESS

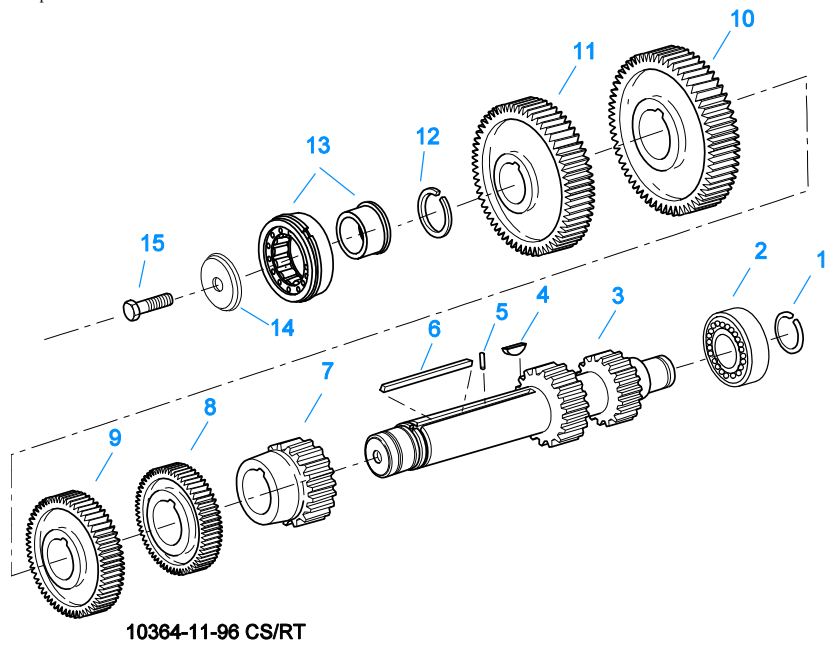
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|---------------------------------|----------------------------|------|--------------------|-------------------------|
| 1 | K-3713RX | REMAN EXCH TRANS CONTROLLER KIT | K-3713 | 1 | | |
| 2 | K-3681 | TRANS HARNESS KIT | 4305915 | 1 | | |
| 4 | K-3682 | RANGE/SPLITTER VALVE KIT | 5561801 ,5561804 ,K - 2907 | 2 | | |
| 5 | X-8-264 | HEX FLANGE HEAD SCREW | X 8 259 | 8 | #10-24 X 1 1/4 | |
| 6 | K-2908 | -O- RING KIT | | 1 | FOR SOLENOID VALVE | |



10444-5/93 CS Helical

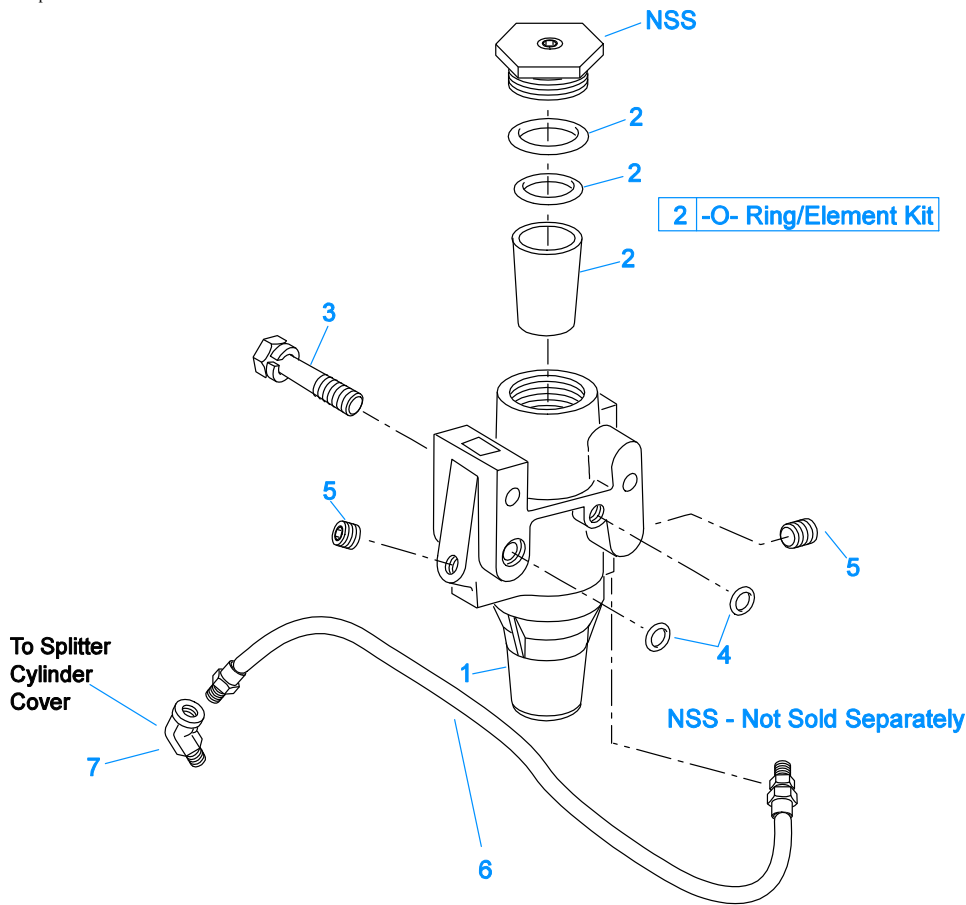
COUNTERSHAFT & BRGS(AUX)

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|------------------------|--|------|-------|-------------------------|
| 1 | 4301851-BOX | BEARING | 4301851 | 4 | | K-3512,K-3513 |
| 2 | K-3220 | COUNTERSHAFT REPLT KIT | 4301792 ,4301793 ,A - 6187 ,A - 6602 ,A - 6603 | 2 | | |
| 3 | 4303124 | SPACER | K-3220 | | | |



COUNTERSHAFT ASSY

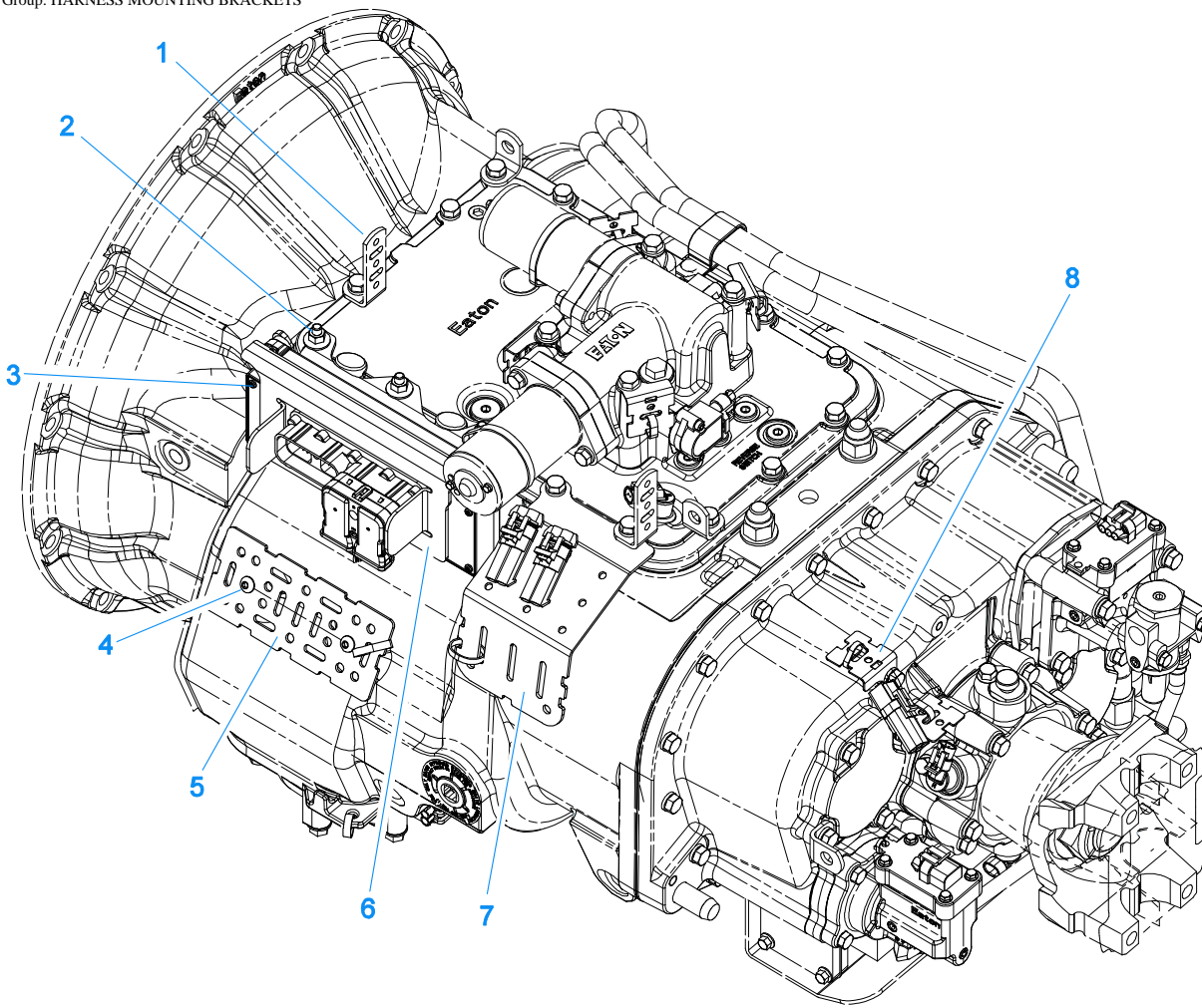
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|---------------------|------------------------------|------|----------------|-------------------------|
| 1 | 4302082 | SNAP RING | | 2 | | K-3512,K-3513 |
| 2 | 4302712 | BEARING | | 2 | | K-3512,K-3513 |
| 3 | 4304073 | CNTRSHFT-W/REV & LO | | 2 | | |
| 4 | X-6-E | KEY | | 2 | | |
| 5 | 62511 | ROLL PIN | | 2 | | |
| 6 | 4304840 | KEY | 19673 | 2 | | |
| 7 | 4304765 | 1ST GEAR-CNTRSHFT | 4303702 ,4304520 | 2 | | |
| 8 | 4300247 | 2ND GEAR-CNTRSHFT | | 2 | | |
| 9 | 4303666 | OD GEAR-CNTRSHFT | 4304508 ,4304315 | 2 | | |
| 10 | 15953 | PTO GEAR - LOWER | | 1 | | |
| 10 | 20840 | PTO GEAR - UPPER | 15952 | 1 | | |
| 11 | 4302666 | DRIVE GEAR-CNTRSHFT | 4303697,4304512 | 2 | | |
| 12 | 19198 | SNAP RING | | 2 | | |
| 13 | 4304599 | BEARING | 4302677, 4304598, 4306332 | 2 | | K-3512,K-3513 |
| 14 | 4304605 | RETAINER | 19548 | 2 | | |
| 15 | X-7-1005 | CAPSCREW | | 2 | 5/8"-18X1-3/4" | |



10131A-08-01

FILTER REGULATOR

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|----------------------|---------------|------|----------------------|-------------------------|
| 1 | K-2170 | FILTER REG KIT | A - 5454 | 1 | | |
| 2 | K-1698 | -O- RING/ELEMENT KIT | | 1 | FOR FILTER REGULATOR | |
| 3 | X-8C-412 | CAPSCREW | X 8S 412 | 2 | 1/4"-20X2-1/4" | |
| 4 | 15114 | -O- RING | | 2 | | K-2170,K-3365,K-3510 |
| 5 | X-12-208 | PIPE PLUG | | 2 | 1/8" NPT | |
| 6 | 55505 | HOSE ASSY | | 1 | 16" | |
| 7 | 12845 | ELBOW | | 1 | 1/8" | K-3366 |

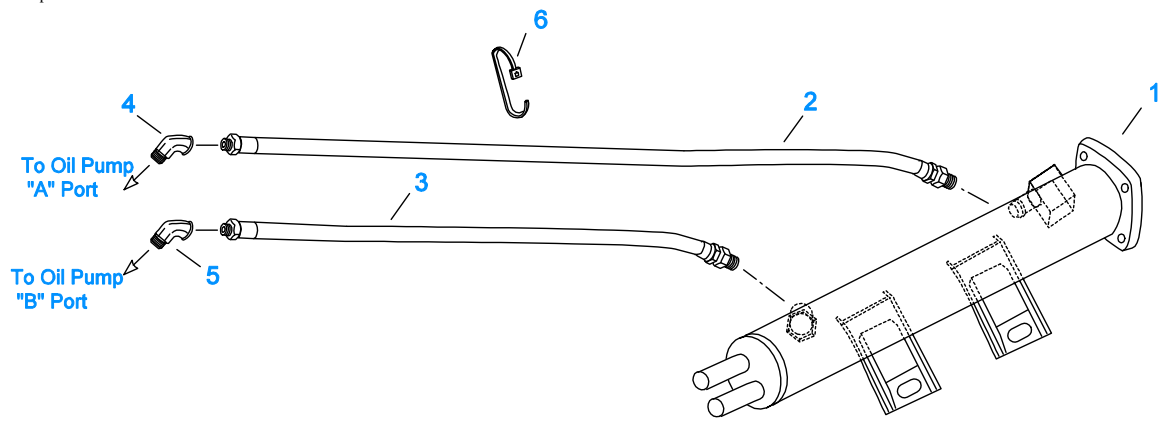


20323-07-06

HARNESS MOUNTING BRACKETS

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-------------------------------|---------------|------|------------|-------------------------|
| 1 | 4305801 | STRAIN RELIEF BRACKET | | 1 | | |
| 2 | 4305870 | NUT ASSEMBLY | | 3 | 5/16-18 | K-3734 |
| 3 | 4305919 | NUT ASSEMBLY | | 3 | (1/4-20) | K-3734 |
| 4 | X-8-561 | BUTTON HEAD SCREW | | 2 | 5/16 X 5/8 | |
| 5 | 4305914 | HARNESS BRACKET | | 1 | | |
| 6 | K-3734 | TRANS CONTROLLER MOUNTING KIT | | 1 | | |
| 7 | 4305871 | WIRE BRACKET | | 1 | | |
| 8 | 4305794 | HARNESS STRAP BRACKET | | 1 | | |

Group: HEAT EXCHANGER

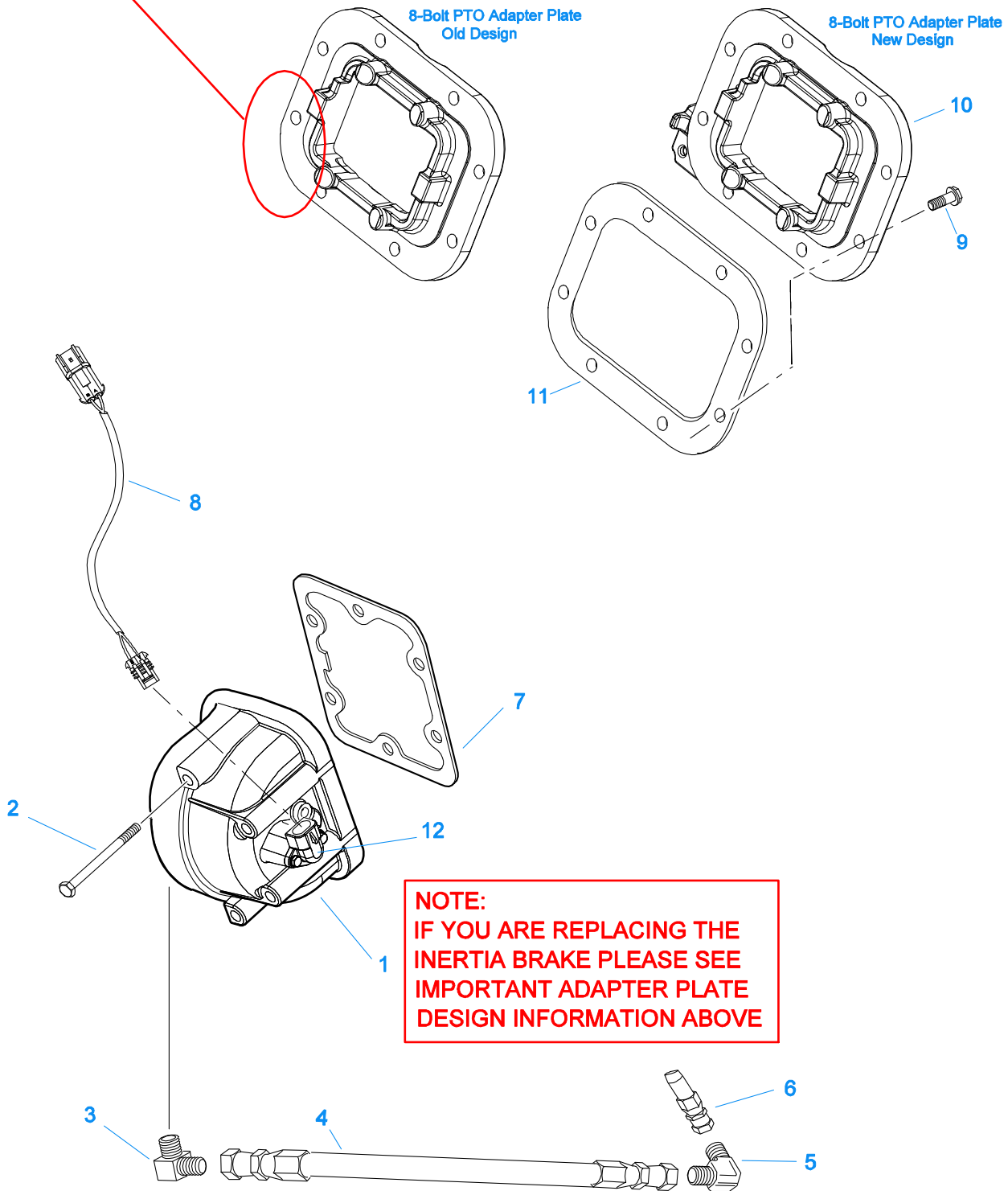


11525-11-04

HEAT EXCHANGER

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------------|---------------|------|---|-------------------------|
| 0 | K-3902 | MOUNTING BRACKET | 4304665 | 1 | NOT PICTURED | |
| 0 | X-8C-6111 | SCREW | | 2 | 3/8"-16X3/4" - NOT PICTURED, FOR MOUNTING BRACKET | |
| 1 | K-3956 | HEAT EXCHANGER KIT | 5586629 | 1 | 3/4" PORTS | |
| 2 | 5588107 | OIL HOSE ASSEMBLY | 5586907 | 1 | 45.0" | |
| 3 | 5588108 | OIL HOSE ASSEMBLY | 5586908 | 1 | 52.0" | |
| 4 | 4304076 | ELBOW | | 1 | | |
| 5 | 4301123 | ELBOW | | 1 | | |
| 6 | 21425 | STRAP | | 2 | | |

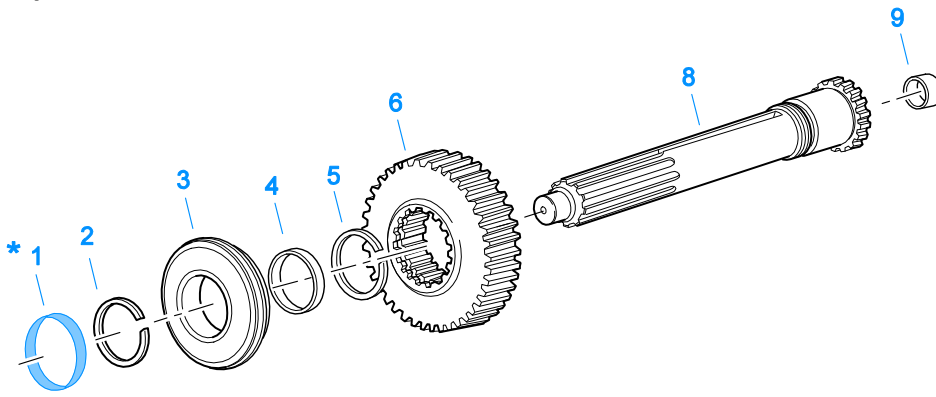
NOTE:
IF YOU ARE REPLACING THE INERTIA
BRAKE AND THE ADAPTER PLATE
LOOKS LIKE THIS YOU WILL ALSO
NEED TO ORDER ITEM #10



20427-03-03

INERTIA BRAKE

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|------------------------------|------------------|------|---|-----------------------------|
| 1 | K-3637 | INERTIA BRAKE KIT | A - 7452 | 1 | PLEASE SEE IMPORTANT SERVICE INFORMATION INDICATED ON ILLUSTRATION. | |
| 2 | X-8-6116 | HEX FLANGE HEAD SCREW | | 6 | 3/8"-16X4.25 | |
| 3 | 691603 | CONN 3/8 PIPE TO3/4 16 | | 1 | | |
| 4 | 5588210 | OIL HOSE ASSEMBLY | | 1 | | |
| 5 | 691651 | ELBOW, 90 DEG MALE | | 1 | | |
| 6 | 4305714 | FILTER FITTING | | 1 | | |
| 7 | 4305309 | GASKET | 1684 | 1 | | K-3509,K-3637,K-3644,K-3739 |
| 8 | K-3739 | INERTIA BRAKE RELOCATION KIT | | 1 | | |
| 9 | X-8C-722 | CAPSCREW | | 8 | 7/16-14X1-1/4 | |
| 10 | K-3644 | INERTIA BRK ADPT PLT KIT | 4305450 ,4305732 | 1 | | |
| 11 | 4305310 | GASKET | 4302810 | 1 | | K-3509,K-3637,K-3644 |
| 12 | K-3638 | I-BRAKE CONNECTOR KIT | 691499 | 1 | | |



* For Shipping Only -- Do Not Replace

*

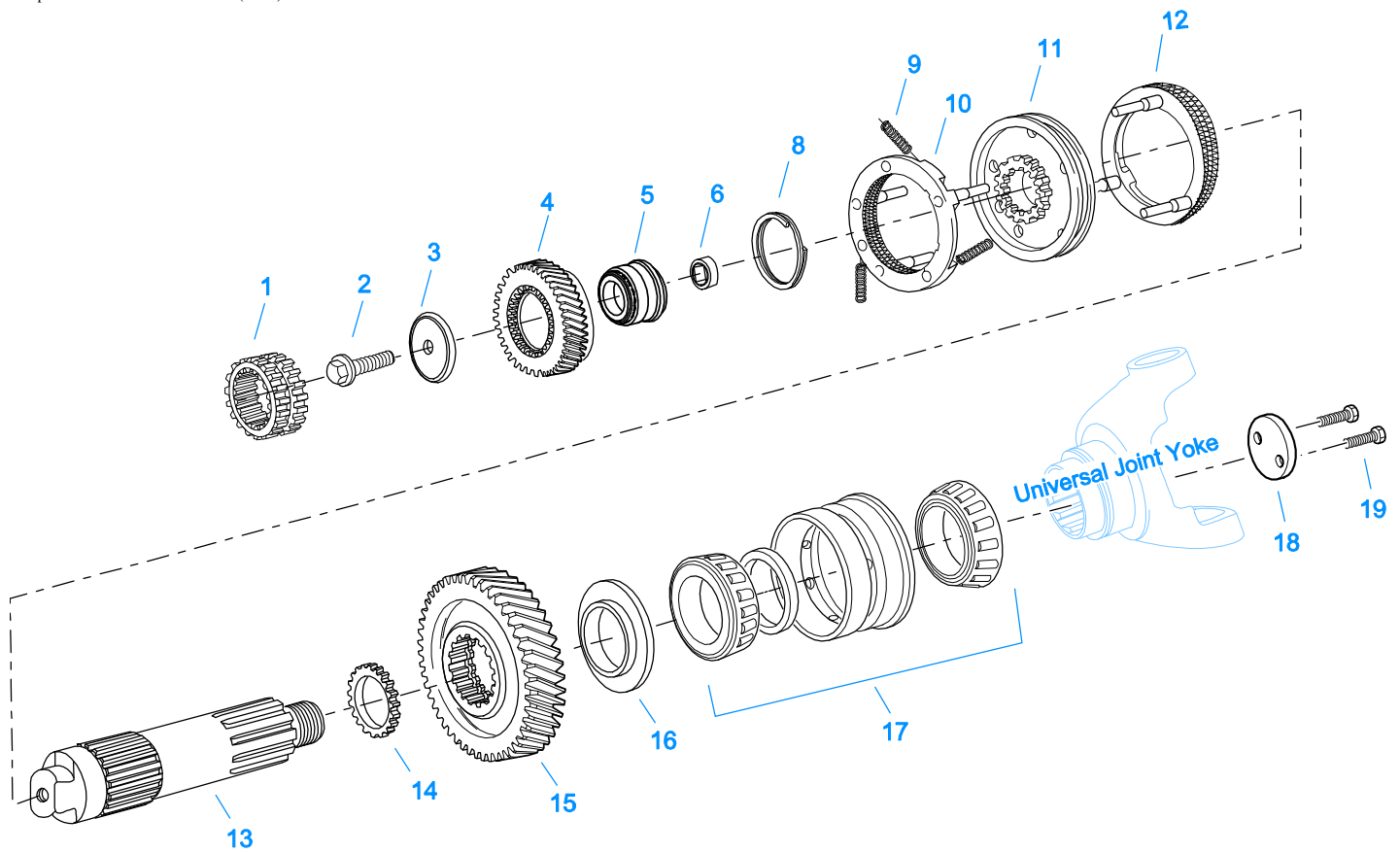
10370-1/92 IS

INPUT SHAFT & DRIVE GEAR

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-----------------|----------------------|------|---------------------------|-------------------------|
| 1 | 23559 | SHIPPING SEAL | | 1 | NOT SOLD FOR SERVICE | |
| 2 | 16980 | SNAP RING | | 1 | | K-3512,K-3513 |
| 3 | 81504 | BEARING | | 1 | | K-3512,K-3513 |
| 4 | 16463 | SPACER | | 1 | | |
| 5 | 14750 | SNAP RING | | 1 | | K-3512,K-3513 |
| 6 | 4304510 | MAIN DRIVE GEAR | 4303695 ,4304314 | 1 | | |
| 8 | S-1659 | INPUT SHAFT | 20535 23566 ,4302661 | 1 | 2" PULL - USE W/FBC 20550 | K-3513 |
| 8 | S-1660 | INPUT SHAFT | 20536 ,23567 | 1 | 2" PUSH - USE W/FBC 20549 | |
| 9 | 16566 | BUSHING | | 1 | | K-3512,S-1659,S-1660 |

KITS & ASSEMBLIES

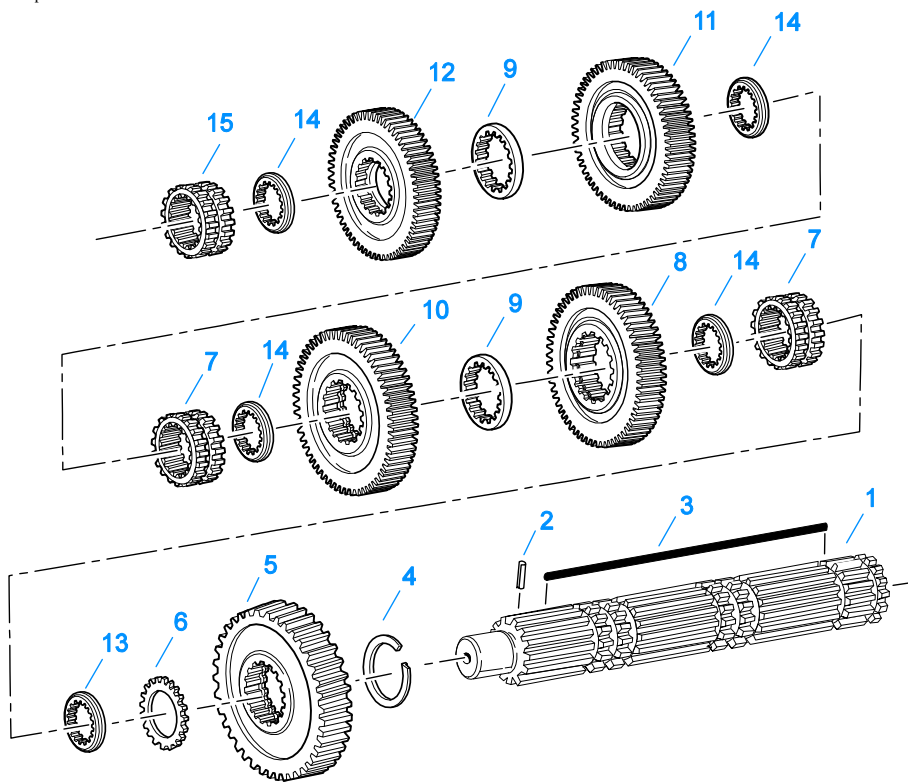
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|----------|--------------|--|--|------|---|-------------------------|
| K-1698 | | -O- RING/ELEMENT KIT | | 1 | FOR FILTER REGULATOR | |
| K-1956 | | COOLER INSTLN KIT | | 1 | | |
| K-2170 | | FILTER REG KIT | A - 5454 | 1 | | |
| K-2805 | | SHIM KIT | 21452 K - 2106 | 1 | | K-3512,K-3513 |
| K-2908 | | -O- RING KIT | | 1 | FOR SOLENOID VALVE | |
| K-2918 | | OIL SEAL KIT | 4302322 4302323 | 1 | "FOR MAGNETIC COVER" | K-3512,K-3513 |
| K-3220 | | COUNTERSHAFT REPLT KIT | 4301792 ,4301793 ,A - 6187 ,A - 6602 ,A - 6603 | 1 | | |
| K-3231 | | SPEED SENSOR KIT | A - 6398 ,A - 6724 | 1 | SINGLE PICK-UP (2 PIN) | |
| K-3365 | | RANGE CYL COVER KIT | 691442 | 1 | | |
| K-3366 | | SPLT CYL COVER KIT | 691444 | 1 | | |
| K-3367 | | OIL PUMP KIT | 4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173 | 1 | | |
| K-3438 | | POSITION SENSOR KIT | 691551 ,691926 | 1 | | |
| K-3497 | | SYNCHRONIZER REPLACEMENT KIT | | 1 | SLIDING CLUTCH INCLUDED IN KIT | |
| K-3509 | | GASKET KIT | | 1 | | K-3512,K-3513 |
| K-3510 | | O-RING KIT - COMPLETE | | 1 | | K-3512,K-3513 |
| K-3512 | | BASIC REBUILD KIT | | 1 | | |
| K-3513 | | BASIC OVERHAUL KIT | | 1 | | |
| K-3523 | | SPEEDO PLUG KIT | 4302707 | 1 | | |
| K-3637 | | INERTIA BRAKE KIT | A - 7452 | 1 | | |
| K-3638 | | I-BRAKE CONNECTOR KIT | 691499 | 1 | | |
| K-3643 | | CLUTCH HOUSING COVER KIT | 691954 | 1 | | |
| K-3644 | | INERTIA BRK ADPT PLT KIT | 4305450 ,4305732 | 1 | | |
| K-3681 | | TRANS HARNESS KIT | 4305915 | 1 | | |
| K-3682 | | RANGE/SPLITTER VALVE KIT | 5561801 ,5561804 ,K - 2907 | 1 | | |
| K-3713RX | | REMAN EXCH TRANS CONTROLLER KIT | K-3713 | 1 | | |
| K-3734 | | TRANS CONTROLLER MOUNTING KIT | | 1 | | |
| K-3739 | | INERTIA BRAKE RELOCATION KIT | | 1 | | |
| K-3760 | | FORCED LUBE CL HSG KIT | 4304328, 4305819, 4305751 | 1 | #1 PULL ALUMINUM | |
| K-3784RX | | REMAN EXCH GEN 3 X-Y SHIFTER KIT | A - 7670,K-3665,K-3784 | 1 | | |
| K-3979 | | SPACER KIT | | 1 | INCLUDES (4) SPACER MOUNTING SCREWS | |
| K-3980 | | COBRA SHIFT LEVER KIT (RHO) | K-3680 | 1 | (LEFT HAND DRIVE), ALSO KNOWN AS (RHO) RIGHT HAND OPERATION | |
| K-3997 | | COBRA SHIFT LEVER KIT (RHO) W/MACK SWING ARM | A - 7181,K-3680 | 1 | (LEFT HAND DRIVE), ALSO KNOWN AS (RHO) RIGHT HAND OPERATION - FOR UNITS USING THE MACK 10MY559M SWING ARM BRACKET | |
| S-1404 | | OIL FILTER | 17238 | 1 | | |
| S-1659 | | INPUT SHAFT | 20535 23566 ,4302661 | 1 | 2" PULL - USE W/FBC 20550 | K-3513 |
| S-1660 | | INPUT SHAFT | 20536 ,23567 | 1 | 2" PUSH - USE W/FBC 20549 | |
| S-2501 | | SPEEDO ROTOR ASSY | 4302242 | 1 | MAGNETIC | |
| S-2913 | | REAR BEARING COVER ASSY | 691637 ,4304651 ,4305833 | 1 | | |
| S-3015 | | CASE ASSEMBLY | 4305866 | 1 | | |
| S-3021 | | SHIFT BAR HOUSING ASSY | 4305895 | 1 | COMPLETE | |
| S-3022 | | SHIFT BAR HOUSING ASSY | 4305895 | 1 | HOUSING ONLY | |
| S-3108 | | MAINSHAFT ASSY | 4302658 ,4303403 ,S - 2268,S-2560 | 1 | | |



10438B-06-11

MAINSHAFT & SYNCHRO(AUX)

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-----------------------------------|----------------------------|------|----------------|-------------------------|
| 1 | 691934 | SLIDING CLUTCH-SPLITTER | 4303822 | 1 | | |
| 2 | X-7-1007 | SCREW | | 1 | 5/8"-18X1-3/4" | |
| 3 | 4301843 | RETAINER | | 1 | | |
| 4 | 691445 | SPLITTER GEAR | | 1 | | |
| 5 | 4300902-BOX | TAPERED ROLLER BRG | 4300902 | 1 | | K-3512,K-3513 |
| 6 | 4301844 | BEARING SLEEVE | | 1 | | |
| 8 | 4303424 | SNAP RING | | 1 | | K-3512,K-3513 |
| 9 | 14897 | SPRING | | 3 | | K-3497,K-3512,K-3513 |
| 10 | A-7331 | SYNCHRONIZER ASSY | 4304396 ,4304397 ,A - 5917 | 1 | HI RANGE | K-3497 |
| 11 | 4301840 | SLIDING CLUTCH | 4303386 | 1 | | K-3497 |
| 12 | A-7254 | SYNCHRONIZER ASSEMBLY | A - 4937 ,A - 5876 | 1 | LO RANGE | K-3497 |
| 13 | 4306305 | MAINSHAFT | | 1 | | |
| 14 | 4301842 | WASHER | | 1 | | |
| 15 | 4301795 | REDUCTION GEAR | 4301794 | 1 | | |
| 16 | 4300912 | SPACER | | 1 | | |
| 17 | 5556507 | TAPERED ROLLER BEARING | | 1 | | |
| 18 | K-4035 | OUTPUT YOKE / FLANGE RETAINER KIT | | 1 | | |
| 19 | X-8-1209M | HEX FLANGE HEAD SCREW | | 2 | M12X1.25X60 | K-4035 |



10337B-10-96

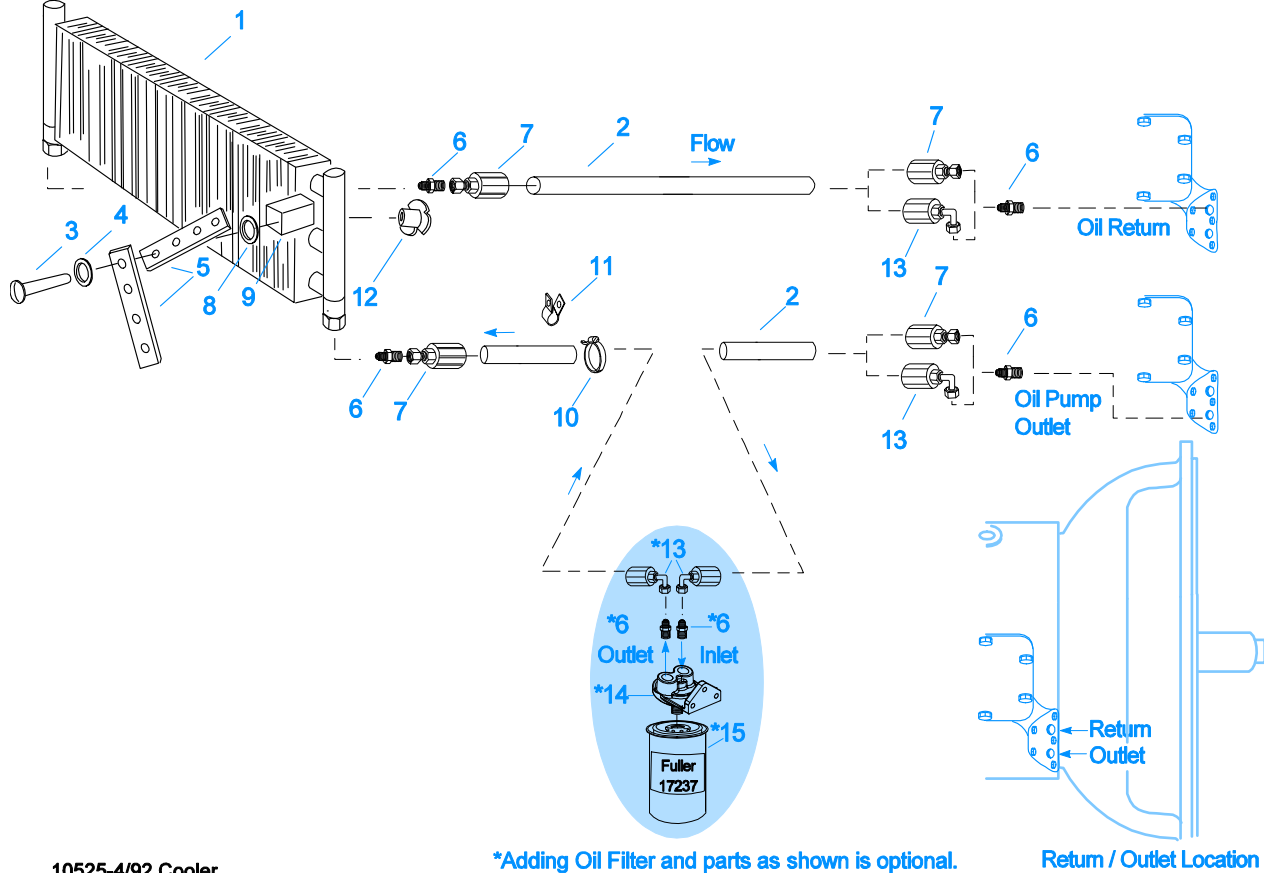
MAINSHAFT ASSY

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|------------------------|-----------------------------------|------|-------|-------------------------|
| 1 | S-3108 | MAINSHAFT ASSY | 4302658 ,4303403 ,S - 2268,S-2560 | 1 | | |
| 2 | 62504 | ROLL PIN | | 1 | | S-3108 |
| 3 | 4304615 | 3-SIDED KEY | 4300120 | 1 | | |
| 4 | 14750 | SNAP RING | | 1 | | K-3512,K-3513 |
| 5 | 23653 | REVERSE GEAR-MAINSHAFT | | 1 | | |
| 6 | 4302047 | SPACER | | 1 | | |
| 7 | 4305997 | SLIDING CLUTCH | 4301407 | 2 | | |
| 8 | 4303412 | LO GEAR-MAINSHAFT | 4303410 | 1 | | |
| 9 | 4303603 | WASHER | 4302397 | 2 | | |
| 10 | 4303701 | 1ST GEAR-MAINSHAFT | | 1 | | |
| 11 | 4302670 | 2ND GEAR-MAINSHAFT | | 1 | | |
| 12 | 4304514 | OD GEAR-MAINSHAFT | 4302664 ,4303698 ,4304316 | 1 | | |
| 13 | 4300382 | WASHER .249-WHITE | | 1 | | |
| 14 | 4302398 | WASHER | | 4 | | |
| 15 | 4305996 | SLIDING CLUTCH | 691922 | 1 | | K-3513 |

MISCELLANEOUS

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|---------|--------------|---------------------|---------------|------|----------------------------------|-------------------------|
| 5586272 | | SHIFT DIAGRAM LABEL | 5586268 | 1 | | |
| 71203 | | SILICONE LUBE | | 1 | 8 OZ (236.59 CC)-FLEET SIZE | |
| 71204 | | ADHESIVE SEALANT | | 1 | 0.5 CC (SINGLE APPLICATION SIZE) | |
| 71205 | | SEALANT | | 1 | 2 CC (SINGLE APPLICATION SIZE) | K-3513 |
| 71206 | | SILICONE LUBE | | 1 | 4 CC (SINGLE APPLICATION SIZE) | K-3510 |

Group: OIL COOLER



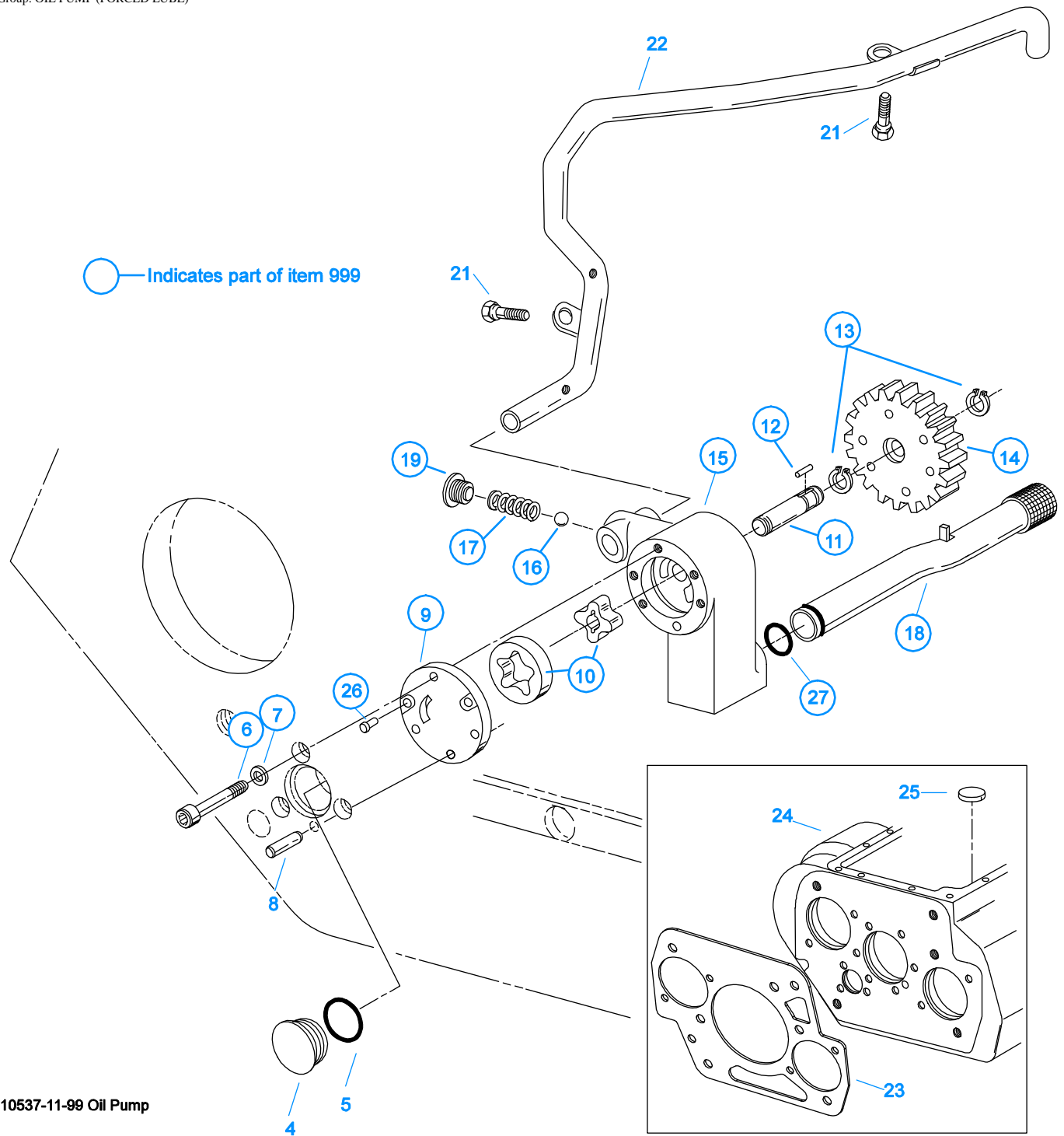
10525-4/92 Cooler

*Adding Oil Filter and parts as shown is optional.

Return / Outlet Location

OIL COOLER

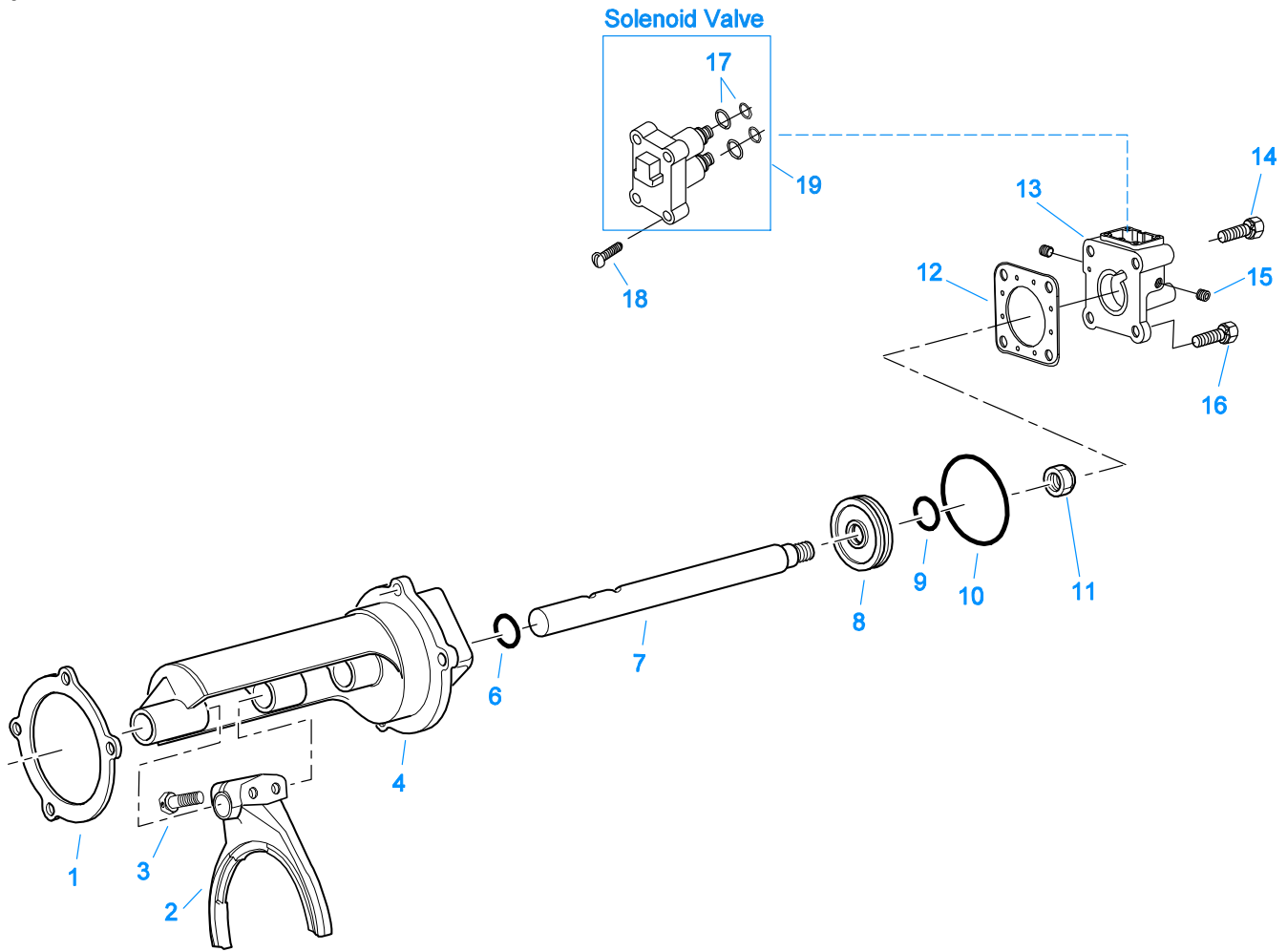
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-------------------|---------------|------|-----------------|-------------------------|
| 1 | 18025 | OIL COOLER | | 1 | | K-1956 |
| 2 | 19424 | HOSE | | 1 | 25 FEET | K-1956 |
| 3 | X-8-535 | CAPSCREW | | 2 | 5/16"-16X2-1/2" | |
| 4 | X-3-506 | LOCKWASHER | | 2 | 5/16" | |
| 5 | 18211 | BRACKET | | 4 | | K-1956 |
| 6 | 19419 | CONNECTOR | | 6 | | K-1956,S-1404 |
| 7 | 19415 | SWIVEL | | 4 | | K-1956 |
| 8 | X-10-501 | WASHER | | 2 | 5/16" | |
| 9 | 18209 | PLUG-RUBBER MOUNT | | 2 | | K-1956 |
| 10 | 17190 | STRAP | | 8 | | K-1956 |
| 11 | 19423 | CLAMP | | 5 | | K-1956 |
| 12 | 18210 | NUT | | 2 | | K-1956 |
| 13 | 19422 | ELBOW | | 4 | | K-1956 |
| 14 | S-1404 | OIL FILTER | 17238 | 1 | | |
| 15 | 17237 | FILTER ELEMENT | | 1 | | S-1404 |



OIL PUMP (FORCED LUBE)

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------|---------------------------------------|------|----------------|-------------------------|
| 4 | 20823 | PLUG | | 1 | | |
| 5 | 14765 | -O- RING | | 1 | | K-3510 |
| 6 | X-8-448 | SCREW | X 8 445 | 3 | 1/4"-20X1-1/4" | K-3367 |
| 7 | 20824 | WASHER | | 3 | | |
| 8 | 20825 | DOWEL PIN | | 1 | | |
| 9 | 4303773 | RETAINER | | 1 | | |
| 10 | K-3367 | OIL PUMP KIT | 4301829 ,4301948 ,4303776 ,4304529 | 1 | | |

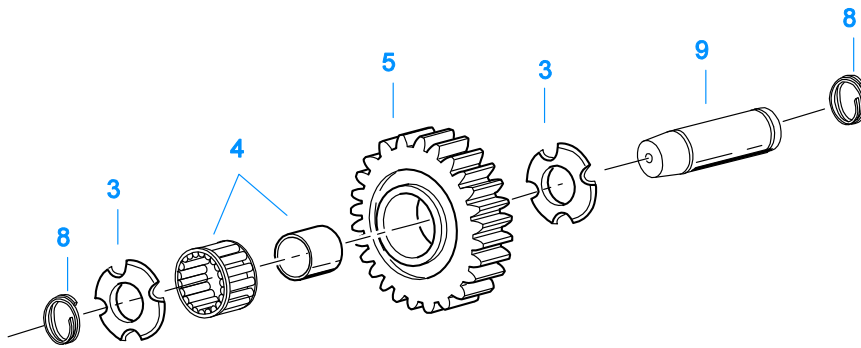
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|-----------------------|---|------|---------------------------------|-------------------------|
| 11 | K-3367 | OIL PUMP KIT | ,4304572 A - 6963 ,A - 7173 4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173 | 1 | | |
| 12 | 20509 | KEY | | 1 | | |
| 13 | 14853 | SNAP RING | | 2 | | |
| 14 | 4303774 | PUMP DRIVE GEAR | 4304880 | 1 | | |
| 15 | K-3367 | OIL PUMP KIT | 4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173 | 1 | | |
| 16 | X-14-700 | STEEL BALL | | 1 | 7/16" | |
| 17 | 4303775 | SPRING | | 1 | | |
| 18 | 4305713 | SUCTION TUBE | 4304628 | 1 | O-RING INCLUDED ON SUCTION TUBE | K-3367 |
| 19 | 4304629 | PLUG | | 1 | | |
| 21 | X-8-686 | CAPSCREW | | 2 | 3/8"-16X3/4" | |
| 22 | 4305715 | SPLITTER LUBE TUBE | A - 7197 | 1 | | |
| 23 | 4306584 | CLUTCH HOUSING GASKET | 4304815,4305668 | 1 | | K-3509,K-3760 |
| 24 | S-3015 | CASE ASSEMBLY | 4305866 | 1 | | |
| 25 | 14373 | MAGNET | | 3 | | S-3015 |
| 26 | X-8-447 | SCREW | | 2 | | |
| 27 | 20225 | -O- RING | | 1 | | |
| 999 | K-3367 | OIL PUMP KIT | 4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173 | 1 | | |



12461-08-01

RANGE CYLINDER

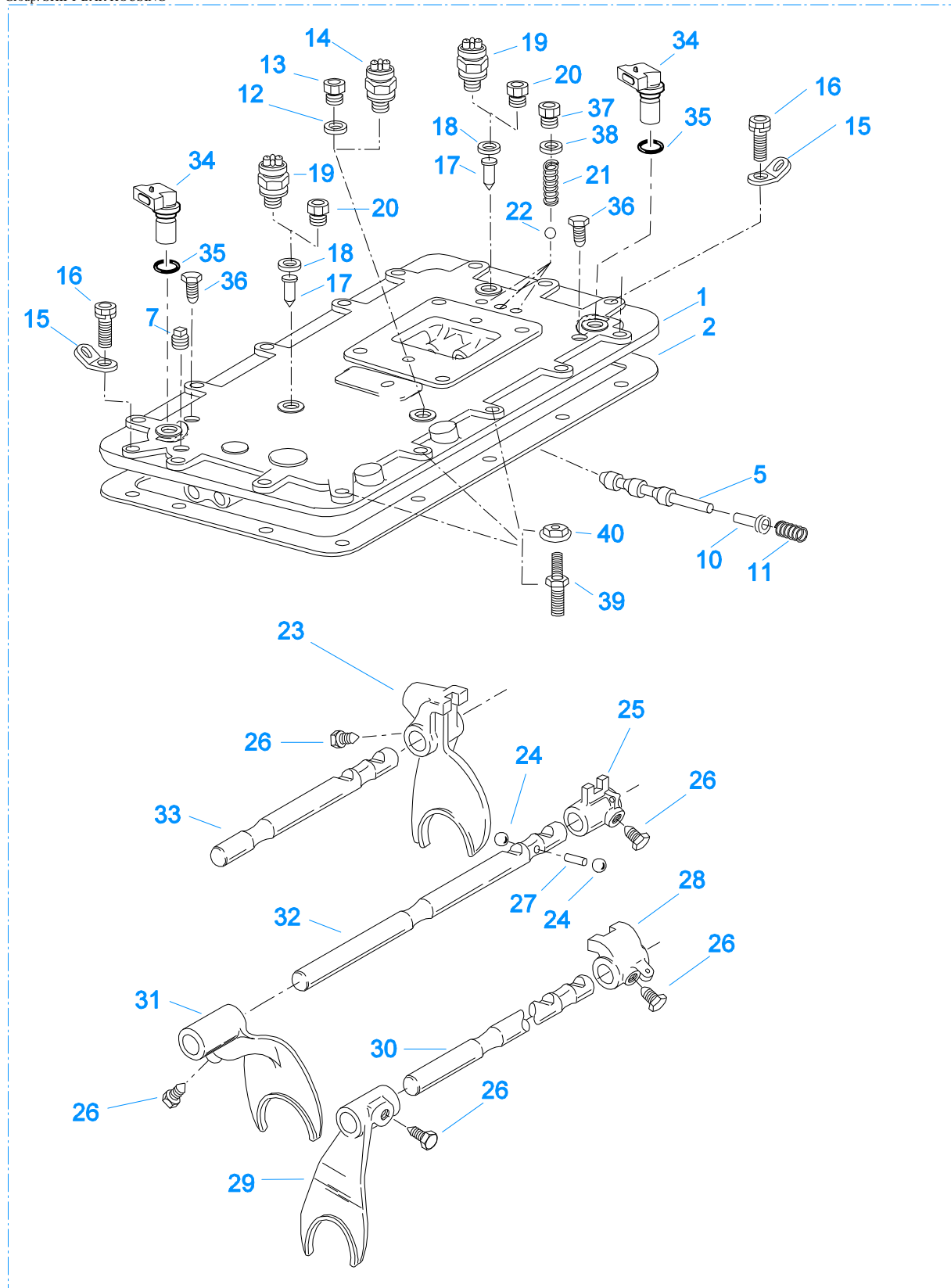
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------------------|----------------------------|------|--------------------|-------------------------|
| 1 | 14347 | GASKET | | 1 | | K-3509,K-3510 |
| 2 | 22823 | SHIFT YOKE | 16775 | 1 | | |
| 3 | X-7-809 | BOLT | X 7 810 ,X 7 811 | 2 | 1/2"-20X1-3/4" | |
| 4 | A-6690 | RANGE CYLINDER ASSY | 4303595 | 1 | | |
| 6 | 14765 | -O- RING | | 1 | | K-3510 |
| 7 | 4303596 | YOKE BAR | | 1 | | |
| 8 | 14341 | PISTON | 23353 | 1 | | |
| 9 | 14345 | -O- RING | | 1 | | K-3510 |
| 10 | 14344 | -O- RING | | 1 | | K-3510 |
| 11 | X-1-1010 | NUT | | 1 | 5/8"-18 | |
| 12 | 691955 | GASKET | 691440 | 1 | | K-3365,K-3509,K-3510 |
| 13 | K-3365 | RANGE CYL COVER KIT | 691442 | 1 | | |
| 14 | X-8L-636 | CAPSCREW | | 2 | 3/8"-16X3-3/4" | |
| 15 | X-12-208 | PIPE PLUG | | 3 | 1/8" NPT | |
| 16 | X-8L-607 | CAPSCREW | | 2 | 3/8"-16X2-1/4" | |
| 17 | K-2908 | -O- RING KIT | | 1 | FOR SOLENOID VALVE | |
| 18 | X-8-264 | HEX FLANGE HEAD SCREW | X 8 259 | 4 | #10-24 X 1 1/4" | |
| 19 | K-3682 | RANGE/SPLITTER VALVE KIT | 5561801 ,5561804 ,K - 2907 | 1 | | |



11382A-10-04

REVERSE IDLER

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------------|---------------|------|-------|-------------------------|
| 3 | 4302982 | WASHER | 14282 | 4 | | |
| 4 | 14287 | BEARING | 4305020 | 2 | | K-3512,K-3513 |
| 5 | 16757 | REVERSE IDLER GEAR | 22409 | 2 | | |
| 8 | 4303336 | RETAINING RING | | 4 | | |
| 9 | 4305513 | IDLER SHAFT | | 2 | | |

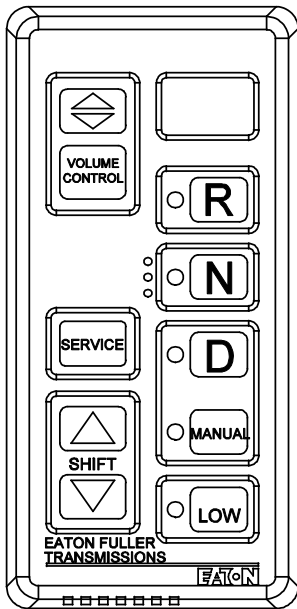


999

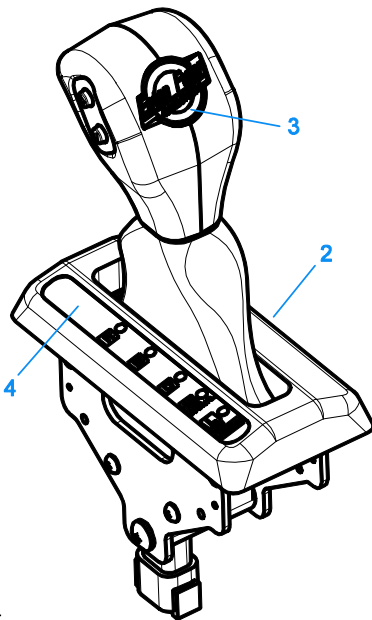
20237-10-05

SHIFT BAR HOUSING

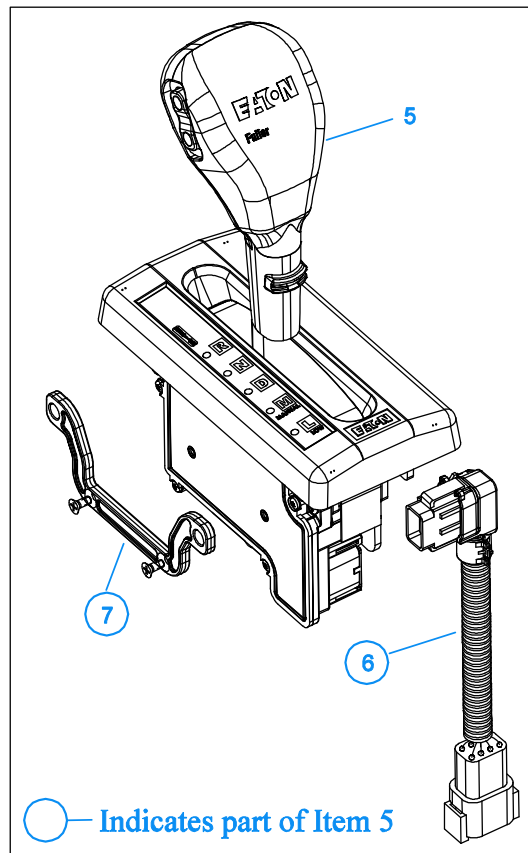
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|------------------------|--------------------|------|---|-------------------------|
| 1 | S-3022 | SHIFT BAR HOUSING ASSY | 4305895 | 1 | HOUSING ONLY | |
| 2 | 4302676 | GASKET | 14918 | 1 | | K-3509,S-3021,S-3022 |
| 5 | 20332 | AIR VALVE SHAFT | 17177 | 1 | | S-3021 |
| 7 | X-12-603 | PIPE PLUG | X12 602 | 1 | 3/8" NPT | |
| 10 | 21966 | PLUNGER | | 1 | | |
| 11 | 4301372 | SPRING | | 1 | | |
| 12 | 17179 | GASKET | | 1 | | S-3021,S-3022 |
| 13 | 4303655 | PLUG | 17178 | 1 | | S-3021,S-3022 |
| 14 | 22941 | NEUTRAL LIGHT SWITCH | 12639 | 1 | SWITCH NORMALLY CLOSED | |
| 15 | 20815 | LIFTING EYE | 17105 | 2 | | |
| 16 | X-8L-602 | CAPSCREW | | 5 | 3/8"-16X1-1/2"- TWO FOR LIFTING EYES, 2 FOR HARNESS BRACKET AND 1 FOR STRAIN RELIEF VALVE | |
| 16 | X-8L-604 | CAPSCREW | | 8 | 3/8"-16X1-1/4" | |
| 17 | 15899 | PIN | | 2 | | |
| 18 | 15900 | GASKET | | 2 | | S-3021,S-3022 |
| 19 | 22940 | REVERSE LIGHT SWITCH | 16830 | 1 | SWITCH NORMALLY OPEN | |
| 20 | 4303656 | PLUG | 15917 | 1 | | S-3021,S-3022 |
| 21 | 691661 | COMPRESSION SPRING | | 3 | | K-3513,S-3021 |
| 22 | X-14-800 | STEEL BALL | | 3 | 1/2" | |
| 23 | 691712 | SHIFT YOKE | 4301376 | 1 | REVERSE/1ST | S-3021 |
| 24 | X-14-1200 | STEEL BALL | | 2 | 3/4" | |
| 25 | 14658 | SHIFT BLOCK | | 1 | 2ND/3RD | S-3021 |
| 26 | 3220 | LOCKSCREW | | 5 | | S-3021 |
| 27 | 1634 | INTERLOCK PIN | | 1 | | S-3021 |
| 28 | 14659 | SHIFT BLOCK | | 1 | 4TH/5TH | S-3021 |
| 29 | 691601 | SHIFT YOKE | 4302212 | 1 | 4TH/5TH | S-3021 |
| 30 | 4301366 | YOKE BAR | | 1 | 4TH/5TH | S-3021 |
| 31 | 691600 | SHIFT YOKE | 4302994 | 1 | 2ND/3RD | S-3021 |
| 32 | 4301365 | YOKE BAR | | 1 | 2ND/3RD | S-3021 |
| 33 | 4301364 | YOKE BAR | | 1 | REVERSE/1ST | S-3021 |
| 34 | K-3231 | SPEED SENSOR KIT | A - 6398 ,A - 6724 | 2 | SINGLE PICK-UP (2 PIN) | |
| 35 | 14142 | -O- RING | | 2 | | K-3638,S-3021 |
| 36 | X-8C-409 | CAPSCREW | | 2 | 1/4"-20X5/8" | |
| 37 | 4303656 | PLUG | 15917 | 3 | | S-3021,S-3022 |
| 38 | 15900 | GASKET | | 3 | | S-3021,S-3022 |
| 39 | 4305869 | SCREW 3/8 & 5/16 | | 3 | USED FOR MOUNTING ECU | |
| 40 | 4305870 | NUT ASSEMBLY | | 3 | 5/16-18, USED FOR MOUNTING ECU | K-3734 |
| 999 | S-3021 | SHIFT BAR HOUSING ASSY | 4305895 | 1 | COMPLETE | |



PUSHBUTTON ASSEMBLY



COBRA LEVER - only for use with 10MY559M Mack Swing Arm Bracket

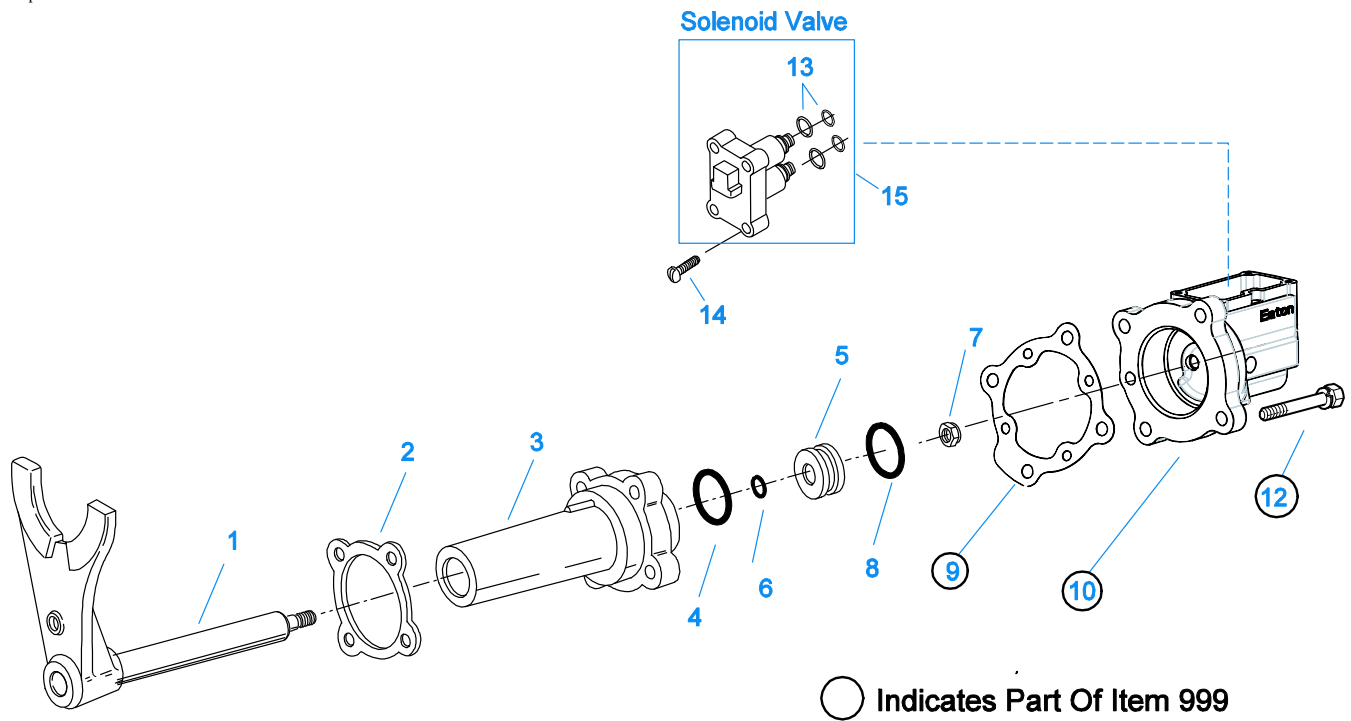


COBRA LEVER - Latest Design - for all applications with the exception of units using the 10MY559M Mack Swing Arm Bracket (see illustration to the left)

10209-06-09

SHIFT CONTROLS

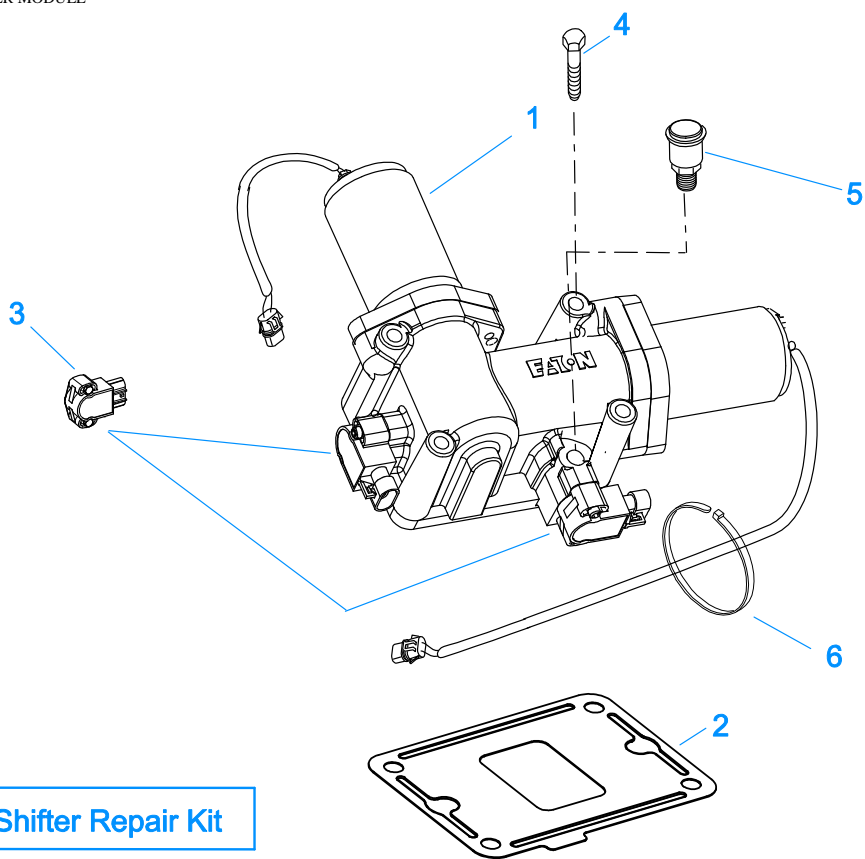
| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--|-----------------|------|---|-------------------------|
| 1 | 4306043 | PUSHBUTTON ASSY | A - 7466,S-3007 | 1 | | |
| 2 | K-3997 | COBRA SHIFT LEVER KIT (RHO) W/MACK SWING ARM | 4305447,K-3680 | 1 | (LEFT HAND DRIVE), ALSO KNOWN AS (RHO) RIGHT HAND OPERATION - FOR UNITS USING THE MACK 10MY559M SWING ARM BRACKET | |
| 3 | 5505111 | SHIFT LEVER KNOB DECAL | | 1 | | |
| 4 | 5505110 | SHIFT LEVER POSITION STRIP | | 1 | | |
| 5 | K-3980 | COBRA SHIFT LEVER KIT (RHO) | K-3680 | 1 | (LEFT HAND DRIVE), ALSO KNOWN AS (RHO) RIGHT HAND OPERATION | |
| 6 | A-7982 | JUMPER HARNESS ASSY | | 1 | | |
| 7 | K-3979 | SPACER KIT | | 1 | INCLUDES (4) SPACER MOUNTING SCREWS | |



12462-08-01

SPLITTER CYLINDER

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|--------------------------|----------------------------|------|--------------------|-------------------------|
| 1 | A-7012 | SPLITTER YOKE ASSY | A - 6304 ,A - 6892 | 1 | | |
| 2 | 4303583 | GASKET | | 1 | | K-3509,K-3510 |
| 3 | 4303582 | SPLITTER CYLINDER | | 1 | | |
| 4 | 21208 | -O- RING | | 1 | | K-3510 |
| 5 | 4301964 | PISTON | | 1 | | |
| 6 | 13653 | -O- RING | | 1 | | K-2908,K-3510 |
| 7 | X-1-805 | NUT | | 1 | | |
| 8 | 21209 | -O- RING | | 1 | | K-3510 |
| 9 | 17073 | GASKET | | 1 | | K-3366,K-3509,K-3510 |
| 10 | K-3366 | SPLT CYL COVER KIT | 691444 | 1 | | |
| 11 | X-12-208 | PIPE PLUG | | 3 | 1/8" NPT | |
| 12 | X-8L-540 | CAPSCREW | | 4 | 5/16"-18X1-7/8" | |
| 13 | K-2908 | -O- RING KIT | | 1 | FOR SOLENOID VALVE | |
| 14 | X-8-264 | HEX FLANGE HEAD SCREW | X 8 259 | 4 | #10-24 X 1 1/4 | |
| 15 | K-3682 | RANGE/SPLITTER VALVE KIT | 5561801 ,5561804 ,K - 2907 | 1 | | |
| 999 | K-3366 | SPLT CYL COVER KIT | 691444 | 1 | | |



7 XY Shifter Repair Kit

20230-09-01

X-Y SHIFTER MODULE

| Item | Current Part | Description | Replaced Part | Qty. | Notes | Kits/Assys Where Needed |
|------|--------------|----------------------------------|------------------------|------|-------------------------------------|-------------------------|
| 1 | K-3784RX | REMAN EXCH GEN 3 X-Y SHIFTER KIT | A - 7670,K-3665,K-3784 | 1 | | |
| 2 | 4305452 | GASKET | 4301958 | 1 | | K-4009 |
| 3 | K-3438 | POSITION SENSOR KIT | 691551 ,691926 | 2 | | |
| 4 | X-8C-615 | CAPSCREW | | 4 | | |
| 5 | 4304602 | BREATHER | 23605 | 1 | 1/4" NPT | |
| 6 | 5559348 | TY-RAP | | 12 | FOR X-Y SHIFTER AND TRANS HARNESSES | K-3681,K-3682,K-3739 |
| 7 | K-4009 | XY SHIFTER REPAIR KIT | | 1 | | |