

## *Quadra-Trac Reduction Gear Info*

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### REMOVAL

Lift and support vehicle.

Loosen all the bolts which attach the reduction unit to the transfer case cover.

Move the reduction unit rearward just far enough to allow the oil to drain from the unit.

Loosen the cable retaining bolt at the shift control lever. Loosen the cable clamp bolt and remove the cable from the clamp bracket and control lever. When the oil has drained, remove the bolts which attach the reduction unit to the transfer case cover. Move the reduction unit rearward to clear the transmission output shaft and pinion cage which is attached to the transfer case drive sprocket.

The pinion cage should not be removed if the transfer case cover assembly is to be removed but may be removed for inspection or replacement if the transfer case assembly is to remain in the vehicle. Pinion cage removal involves only removing the snap ring which secures the cage to the sprocket and sliding the cage rearward.

An oil baffle, used only with reduction units, can be seen on the back of the transfer case cover. This baffle need not be removed except for replacement.

### INSTALLATION

If removed, place the reduction oil baffle and tube assembly on the rear of the transfer case cover.

If removed, install the pinion cage onto the transfer case drive sprocket splines. Install the retaining snap ring. Be sure that the retaining snap ring is seated completely in the groove.

Clean the sealing ring groove in the transfer case cover and install the sealing ring.

Lift the reduction unit and mesh the caged pinions with the sun gear and ring gear, and align the sun gear inner splines with the transmission output shaft splines. Move the reduction unit forward until it contacts the sealing ring. Loosely install the attaching screws. Alternately tighten the screws until the specified torque for each screw has been reached.

Connect and adjust the shift control cable: refer to "Control Cable Adjustment" for Procedure.

Fill the reduction unit and transfer case assembly with the proper quantities of lubricants

# REDUCTION UNIT SHIFT CABLE ADJUSTMENT

Loosen the nut which clamps the cable to the shift lever pivot. Be sure the cable can move freely in the pivot.

Move the reduction shift lever to the most rearward detent position (Hi range position). Push the Low Range lever inward until it stops. Pull the low range lever out slightly; no more than 1/16".

Tighten the cable clamp nut at the reduction shift lever.

## LOW RANGE - REDUCTION UNIT OPERATION

For operation under unusually severe on or off-road conditions, the low gear reduction unit provides maximum braking and maximum torque at low ground speeds.

### To engage Low Range Drive

Take foot off accelerator

Come to a rolling stop -- under 5mph

Shift automatic transmission into Neutral with vehicle moving

Pull firmly out on the "Low Range" lever (located just below the instrument panel to the right of the steering column)

### To disengage Low Range Drive

Shift automatic transmission into NEUTRAL at low speed 5 -- 10mph

Push the "Low Range" lever in firmly

If the Low Range Drive is infrequently used, it is recommended that it be engaged and for at least five minutes each month.

The optional Low-Range Reduction Unit may be added to the basic Quadra-trac unit at any time.

### Torque (foot pounds):

#### REDUCTION UNIT

	15-25
Cable housing clamp nut	7-12
Fill plug	15-25
Shift Lever cable clamp nut	10-20
Shift lever to shaft nut	15-25
Reduction unit power take-off cover to case	
Reduction unit to transfer case bolt:	3/8"-16.....15-25
	5/16"-18.....8-10

('73 Technical Manual)