## Addendum to IN 339 Instruction Manual for Orion® SkyQuest™ XX12i IntelliScope Truss Tube Dobsonian

# Orion® SkyQuest™ XX12 Truss Tube Dobsonian with Light Shroud #27190

This Addendum covers assembly and use of the SkyQuest XX12 Truss Tube Dobsonian in its native (non-IntelliScope) configuration; that is, without the IntelliScope Computerized Object Locator. In this configuration, the XX12 is designed to be used like a traditional Dob, without the aid of digital object location technology. You should refer to optional star maps and/or astronomy software programs to help you locate and view objects of interest.

If you decide later that you would like to upgrade your XX12 to add the IntelliScope Computerized Object Locator (#7888), you can purchase it separately.

This addendum includes additions and revisions to IN 339, the instruction manual that was written for, and comes with, the #9793 SkyQuest XX12i IntelliScope Truss Tube Dobsonian with Computerized Object Locator. Most of the information in the XX12i Instruction Manual is relevant to the #27190 native XX12. However, any reference to the IntelliScope Object Locator Kit or its component parts can simply be ignored.

Below is a list of specific sections of the original instruction manual that can be disregarded. You may find it useful to lightly pencil an "X" over these sections in the manual as a reminder to ignore them when reading through it. Don't completely obscure the text and figures, though! Should you decide to add the IntelliScope functionality in the future by purchasing the optional IntelliScope Object Locator Kit, you will want to be able to read all of the material in the original telescope manual.

#### **One-Year Limited Warranty**

The Orion SkyQuest XX12 Truss Tube Dobsonian with Light Shroud is warranted against defects in materials or workmanship for a period of one year from the date of purchase. This warranty is for the benefit of the original retail purchaser only. During this warranty period Orion Telescopes & Binoculars will repair or replace, at Orion's option, any warranted instrument that proves to be defective, provided it is returned postage paid to: Orion Warranty Repair, 89 Hangar Way, Watsonville, CA 95076. Proof of purchase (such as a copy of the original receipt) is required.

This warranty does not apply if, in Orion's judgment, the instrument has been abused, mishandled, or modified, nor does it apply to normal wear and tear. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state. For further warranty service information, contact: Orion Customer Service (800) 676-1343; support@telescope.com.

## Disregard These Sections in the XX12i IntelliScope Instruction Manual

Page	Section	Item
4	Parts List	Box #1A: IntelliScope Object Locator Kit
7	Assembly	Steps 6, 7, 15-24, 26
22	5	Subsection entitled "The IntelliScope Computerized Object Locator"

## Disregard These Figures in the XX12i IntelliScope Instruction Manual

Figure 1, Figure 3, Figure 6, Figures 10-14, Figure 26

#### Other Additions/Revisions to the Instruction Manual Content

#### Section 2. Assembly - Assembly of the Dobsonian Base

Since your #27190 SkyQuest XX12 Truss Tube Dobsonian does not include the IntelliScope Computerized Object Locator Kit, you will not need to install the altitude encoder assembly, cables, bumper, and the other associated parts.

You should, however, install the azimuth encoder disc and the brass azimuth bushing as described in steps 9 and 10. These parts are identified in Figure 5 as parts J and F, respectively. The bushing is needed to properly sleeve the azimuth axis screw, and the metal encoder disc provides a secure platform on which the brass bushing seats. Refer to Figure 7 in the instruction manual to see them installed.

It is not necessary, however, to install the azimuth encoder board (E in Figure 5) and spacer washers (O and P) described in step 6. Nor do you need to attach the encoder connector board (step 15) that came with your scope. Keep these and any other unused parts in a safe place, though; you will need them if you ever decide to add the optional Computerized Object Locator.



Providing Exceptional Consumer Optical Products Since 1975

#### OrionTelescopes.com

Customer Support (800) 676-1343 E-mail: support@telescope.com

Corporate Offices (831) 763-7000 89 Hangar Way, Watsonville, CA 95076

© 2008-2010 Orion Telescopes & Binoculars

### Section 2. Assembly – Connecting the Optical Tube to the Dobsonian Base

The following text and images should be substituted for step 3 of this section and Figure 26 in the original instruction manual (see pp. 14 and 15).

Find the 1-1/4"-long black plastic sleeve and slide it onto the other tensioning knob's threaded shaft as shown in Figure 26a below. Then insert the sleeved shaft into the hole in the right side panel, as shown in Figure 26b. Thread the shaft into the threaded hole in the telescope side bearing until the knob is just barely tight. DO NOT OVERTIGHTEN or the plastic sleeve could split or deform. There will be a ½" gap or so between the knob and the side panel – that is fine.





**Figure 26.** Install the black plastic sleeve on the right-side tensioning knob (a), then insert the sleeved shaft into the hole (b) and thread it into the telescope side bearing until just barely tight.

## Corrections to the SkyQuest XX12i IntelliScope Instruction Manual (IN 339, Rev A)

Page	Section	Item
3	Introduction	Second sentence should read: It's a deep-sky observer's dream telescope, offering jumbo 12" optics made from low-thermal-expansion glass, a stylish base, and a sturdy truss tube design that easily disassembles into compact, portable components.
26	Specifications	Primary mirror specification should

read: 305mm diameter reflective surface, low-thermal-expansion glass, parabolic, center marked

Mirror coatings specification should read: Enhanced-reflectivity (94%) aluminum with SiO<sub>2</sub> overcoat

#### **Installing the Light Shroud**

The #27190 SkyQuest XX12 Truss Tube Dobsonian includes a custom-designed Light Shroud (#15097). For the best performance from any truss Dobsonian, a shroud is a must. This one, custom designed for the SkyQuest XX12, is made of a stretchy nylon blend material that fits like a glove over the truss poles of the XX12, fastening with thick elastic bands on both ends. The water-resistant, opaque black fabric blocks stray



light from entering the optical path, thus improving image contrast. It's also breathable, which minimizes unwanted vibration of the scope in breezy conditions. Use of the shroud will lessen the accumulation of dust and dirt on the mirrors during use, and will help prevent dew from forming on them.

To install the shroud, first remove any accessories from the upper tube section, such as the eyepiece and finder scope, and rack the focuser drawtube all the way in. Then stretch open the elastic band on one end of the shroud and slip it over the upper tube section and onto the truss pole assembly. Then stretch open the elastic band on the other end of the shroud and slip it over the upper tube section, to just above the upper truss support ring; that is, just above the truss pole connectors. Now stretch the bottom end of the shroud over the lower truss support ring and pole connectors. The installed shroud should now resemble the picture above.

Now you're all set to observe!